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# **THE ROLE OF TRUST IN ORGANIZATIONS: DO FOCI AND BASES MATTER?**

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
In partial fulfillment of the  
Requirements for the degree of  
Doctor of Philosophy

in

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in Business Administration (Management)

by  
Jixia Yang  
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## **ABSTRACT**

A recent literature review shows that the effects of trust on workplace outcomes are less consistent than might be expected (Dirks & Ferrin, 2001). For some work-related outcomes, studies have revealed significant effects of trust whereas others have not. By definition, trust describes a psychological state comprising positive expectations about the behavior and intentions of another. The position of this dissertation is that, to have a full understanding of the effects of trust, researchers need to consider on what basis this positive expectation is formed (i.e., trust's bases) as well as in whom this positive expectation is placed (i.e., trust's foci). Based on this position, and with trust bases and foci being explicitly recognized, the effects of trust were examined vis-à-vis the following variables: organizational commitment (affective and continuance), supervisor-subordinate conflict (task- and relationship-related), citizenship behavior directed toward coworkers (task- and person-focused), communication flow (upward and lateral), job satisfaction, task performance, and openness to organizational change.

Data via survey were collected from 564 medical center employees (353 subordinates and 210 supervisors). Six combinations of trust bases and foci were found to be distinguishable, and each made a unique contribution to the predicted variance in subordinate job satisfaction. Increases in both cognitive and affective trust in one's supervisor were found to reduce task supervisory conflict and, with greater magnitude, reduce relationship supervisory conflict. Affective trust in management was found to be an important predictor of affective organizational commitment. Trust in one's supervisor, especially affective trust in one's supervisor, significantly predicted task performance. Interactions among subordinates, as indicated by open communication and helping behavior toward one another, were found to be influenced by trust in one's supervisor. In particular, both cognitive and affective trust in one's supervisor contributed

to the prediction of task- and person-focused interpersonal citizenship behavior toward coworkers. Compared to cognitive trust, affective trust in one's supervisor was more predictive of both upward and lateral communication. Implications for research and practice, limitations, and future research directions are discussed.



## **CHAPTER 1: DISSERTATION TOPIC**

### **Introduction**

Trust has been studied in diverse such disciplines as economics (e.g., Williamson, 1993), psychology (e.g., Rotter, 1967), and sociology (e.g., Zucker, 1986). Management scholars have likewise been interested in the study of trust. This interest has been reflected in special issues on trust in the *Academy of Management Review* (1998) and, more recently, *Organization Science* (2003) and *International Journal of Human Resource Management* (2003). Trust has been defined in different ways depending on the focal context. There is, however, a common core across most definitions of trust—a psychological state comprising a willingness to accept vulnerability based on positive expectations of the intentions or behavior of another (Rousseau, Sitkin, Burt, & Camerer, 1998). In this regard, progress has been made in conceptualizing trust (e.g., Mayer, Davis, & Schoorman, 1995; McAllister, 1995), measuring trust (e.g., Cummings & Bromiley, 1996), and understanding its antecedents (e.g., Butler, 1991) and consequences (e.g., Dirks & Ferrin, 2001). In general, management scholars interested in organizational behavior (OB) have focused on developing and maintaining trust within workplace relationships. Following this lead, this dissertation focuses on the nature of interpersonal trust in work organizations.

### **Statement of Purpose**

Despite a growing literature, some suggest that trust remains as an under-researched area of study (cf. Becker, 2002), with many research questions warranting further attention. For example, although it has been recognized that trust plays an important role in work organizations, empirical evidence has not consistently supported this perspective (Dirks & Ferrin, 2001). The objective of this dissertation is to extend our understanding of trust in work

organizations by investigating trust foci and bases. The premise of this dissertation is that trust-outcome relationships can be portrayed more accurately through an identification and consideration of varying trust foci and bases.

As suggested by the preceding definition of trust, a full understanding of trust involves two major issues: bases and foci. The first issue concerns what type of substantive expectations serve as a basis for trust (Rousseau et al., 1998). Positive expectations involved in the concept of trust relate to another's intended or actual conduct (Lewicki, McAllister, & Bies, 1998). Given the view that trust hinges on expectations and varying conditions that are likely to activate and maintain differing expectations, it is reasonable to posit that trust is multidimensional (Bhattacharya et al., 1998). A number of elements (Butler, 1991) are likely to contribute to the formation of trust-related expectations. Treating trust as a multidimensional construct may be justified when some elements are more likely to strengthen a distinct portion of trust than other elements. This distinctiveness may further result in differential effects on trust outcomes. The second issue concerns the focus of trust—to whom a trustor would be willing to be vulnerable. Trust is target-specific in that one's trust varies according to the individual(s) with whom one is interacting (Bhattacharya, Devinney, & Pillutla, 1998). Because trust is not necessarily transferable across different targets, pinpointing the focus of one's trust is essential in formulating research questions.

Trust foci and bases are not entirely new, but little empirical work has been devoted to examining either concept. Before developing my hypotheses, I use this section to provide an overview of these two concepts in regard to employee trust within organizations.

## Trust Bases

A critical consideration is what underpins positive expectations that one has regarding another's intended behavior. Positive expectations about another's intended behavior leads to perceptions of trustworthiness. Some OB researchers have contended that there may be distinct reasons that trustors develop such perceptions (e.g., Bhattacharya et al., 1998; Cummings & Bromiley, 1996; Kramer, 1999; Lewicki & Bunker, 1996; Lewis & Weigert, 1985; McAllister, 1995; Mishra, 1996; Rousseau et al., 1998; Sheppard & Tuchinsky, 1996). After reviewing various ways of categorizing the genesis of trust perceptions, I considered trust in terms of two fundamental bases—cognitive and affective. A cognitive base contains elements that are more instrumental and calculative in nature. By contrast, an affective base subsumes elements that are more emotional and relational in nature.

Although researchers use different terms to describe these two trust bases, commonalities can be found in their underlying logic. Tyler and DeGoey (1996) label these two bases instrumental trust and relational trust. Lewicki and Bunker's (1996) calculus- and knowledge-based trust are cognitive bases of trust whereas their identification-based trust corresponds with affective trust. Jones and George's (1998) argument for conditional and unconditional trust also parallels the cognitive and affective trust definitions. In line with their theoretical framework, utilitarian concerns, cost-benefit calculus, and personal characteristics are dominant in engendering cognitive trust, whereas relational concerns and emotional attachment are dominant in establishing affective trust. From an array of perspectives on trust, Dirks and Ferrin (2002) suggested a parsimonious two-dimensional framework: one coincides with cognitively-oriented definitions and the other emphasizes relational issues.

In general, trust may thus result from logical reasons, strong positive affect, or a combination of both (Lewis & Weigert, 1985; Misztal, 1996). This notion denotes that either more objective factors, such as another's behavior history, or more subjective reasons, such as personal relations, can influence one's trust in another's intended behavior. Although both bases may equally underlie trust, the trust literature has been skewed toward cognitive explanations of trust (Dirks & Ferrin, 2002). This dissertation addresses this imbalance by explicating and measuring the affective component of trust. The concept of affective trust is expanded by including a trustor's emotional attachment toward a trustee as a determinant of affective trust. Emotional attachments can color one's experience of trust, and strongly influence how a person forms opinions about trustworthiness as well as how to display trust (Jones & George, 1998; Williams, 2001). It is further suggested that factors contributing more to the formation of affective trust (i.e., relationship quality) will be contingent on the referent under consideration. For example, individuals may have affective trust in management because of a general emotional attachment to an employing organization, whereas they may vest affective trust in an immediate supervisor due to their personal relationship. Therefore, the functions of each trust base may not be identical for different trust foci, even though they share a common conceptual core defining trust as a willingness to accept vulnerability based on positive expectations of the intentions or behavior of another.

### Trust Foci

In any organization, there is more than one focus or referent to which members can attach their trust. It is possible that an employee may trust in one specific referent, but distrust another (McCauley & Kuhnert, 1992). Therefore, a clearer depiction of trust referents facilitates the formulation of hypotheses pertaining to relations between trust and other organizational

phenomena (Clark & Payne, 1997). Toward this end, OB researchers have attempted to identify various trust foci.

Targets of trust can be one person, group, or firm (Hosmer, 1995). For example, Fox (1974) distinguished between lateral and vertical trust. The former is trust among peers who share a similar work situation, whereas the latter refers to trust in higher hierarchical levels such as an immediate supervisor or management. Using the same logic, Whitener (1997) suggested that employees can have trust in at least two different types of foci, one category being specific individuals or groups of individuals, such as supervisors and coworkers, and the other being generalized representatives, such as an employer or higher level management. I intend to discuss employee trust with reference to all three afore-mentioned referent groups—trust in one’s immediate supervisor, trust in coworkers reporting to the same supervisor, and trust in management. In this dissertation, “employees” will refer to those who are not in managerial positions.

Both trust in a supervisor and trust in generalized others (i.e., coworkers) is of importance in maintaining workplace cooperation (Hartog, 2003) and, thus, have meaningful implications. Whereas trust in one’s supervisor and trust in coworkers are more specifically circumscribed foci, trust in management is more general. In a large and complex organization, management itself has been suggested as a referent of employee trust (Mayer & Davis, 1999). “Employees carry images of the organization based on the decisions and actions of the executive group. These ‘images’ of the organization as an entity are separate from those which are formed based on the immediate contact the employee has on a daily basis with his or her supervisor” (Nyhan, 1999, p. 60). In studies of trust in management, “management” has been considered as an identifiable set of people whose actions have a significant impact on employees (Mayer & Davis,

1999). Examples of sets of such individuals are: people who make policies, rules, and major decisions in an organization (Scott, 1980); the group defined by membership of an organization's strategic and operational executives, all of whom contribute directly to key strategic and business decisions (Albrecht & Travaglione, 2003); most managers in an organization (Cropanzano, Prehar, & Chen, 2002); and those at the business division level (Spreitzer & Mishra, 2002).

Management is identified as a unique referent for employee trust because its responsibilities differ from those of immediate supervisors. An organization's management is responsible for formulating business strategies, and locating and allocating valued resources. Thus, over time its decisions and actions are expected to have a broad impact on employees. One of the important tasks for an organization's management involves translating general goals into action plans and communicating them to employees (Kraut, Pedigo, McKenna, & Dunnette, 1989). In this regard, trust in management may affect whether employees buy into an organization's objectives and fully engage in management initiatives. A distinction between trustworthiness of immediate supervisors specifically and management in general has been empirically demonstrated by Clark and Payne (1997). From prior studies that simultaneously examined trust in management and trust in immediate supervisors (e.g., Costigan et al., 1998; Morgan & Zeffane, 2003; Nyhan & Marlowe, 1997; Scott, 1980), it appears that employees differentiate between management and their immediate supervisors. Relationship processes involving management differ from those involving supervisors, as exemplified by recent research on justice (Cropanzano et al., 2002) and perceived support (Stinglhamber & Vandenberghe, 2003). Therefore, an organization's management in general, as distinguished from first-line supervisors, is the focal referent when the term "trust in management" is used in this dissertation.

In conclusion, when considering what leads to trust or what will result from trust, one needs to be clear about which trust foci and bases are being considered. Differing foci and bases of trust may affect the nature or magnitude of trust's association with other variables. Because most previous studies usually touch on either trust foci or trust bases, and have not integrated them (Dirks & Ferrin, 2002), this dissertation strives to gain knowledge about trust by considering both.

### **Summary**

This chapter provides a general overview regarding current status of research on trust foci and bases. It points to the theoretical importance of distinguishing among trust referents (i.e., foci) and dimensionality (i.e., bases). It also highlights an emerging trend in organizational research that recognizes trust foci and bases. To build on this trend, my dissertation attempts to integrate the bases and foci of trust. The research that incorporates both trust bases and foci when considering employee attitudes and behavior can contribute to better theory development and enhanced prediction of workplace outcomes. Toward this end, hypotheses are developed concentrating on the potential workplace outcomes of foci and bases of employee trust.

This chapter sets the stage for the remaining dissertation chapters by outlining two major issues in the organizational trust domain. Chapter 2 will develop hypotheses concerning both foci and bases of trust and their links with workplace outcomes. Chapter 3 will detail a pilot test conducted to refine the measurement of trust. Chapter 4 will describe the sample, procedure, measures of the study variables. Chapter 5 will describe the analytical strategies and present the results of hypothesis testing. Chapter 6 will summarize the implications of the results for research and practice, study limitations, and avenues for future research.

## **CHAPTER 2: HYPOTHESES DEVELOPMENT**

### **Bases and Foci of Trust**

#### Bases of Trust

As previously described, elements serving as bases of trust can be generally classified as cognitive or affective. Most trust research in the OB field has concentrated on cognitive interpersonal trust, which is grounded in beliefs about another's characteristics and benevolent intentions (McAllister, 1995). For instance, perceived trustworthiness is often attributed to a trustee's ability, benevolence, and integrity (Butler, 1991; Mayer et al., 1995; McKnight, Cummings, & Chervany, 1998; Mishra, 1996). Ability includes task skills and competencies. Benevolence refers to a trustee's good intentions, and integrity refers to a trustee's honesty. Thus, the cognitive component of trust subsumes a more instrumental perspective on trust. Noninstrumental motivations, however, are also deemed important in studying trust (Tyler & Kramer, 1996). Less research has dealt with affective trust grounded in emotional bonds among interdependent individuals, despite evidence supporting their importance (Johnson-George & Swap, 1982; McAllister, 1995; Rempel, Holmes, & Zanna, 1985). Evidence can also be found suggesting that trust, drawing on affect-oriented relational concerns, plays an important role in influencing behavior (Tyler & Kramer, 1996).

The distinction between the two trust dimensions relates to how trust originates. One may cognitively trust another because of objective reasons such as personal characteristics, whereas one may affectively trust another due to their relationship. Information needed to make judgments with respect to each dimension may differ in content and magnitude. Cognitive trust draws from a trustee's ability, fairness, and consistency, whereas affective trust comes from one's bonds with a trustee. Studies by Tyler and DeGoey (1996) confirm that when social bonds



exist, trustworthiness attributions are affected by relational, rather than instrumental, determinants. As compared to affective trust, cognitive trust may require more information about benefits and risks when making trust decisions. A close personal relationship can be recognized by individuals despite the absence of an active appraisal process regarding the specifics of their association (Holmes, 1991). Uzzi (1997) discovered that the information needed to compute the risk of an action was not assessed by parties having close or special relationships. Rather, he found there was an absence of monitoring devices in affective-trusting ties. Hence, the ontogenesis of these trust dimensions supports decoupling the two bases of trust.

Differences between cognitive and affective trust may reflect how employees are involved in an organization's social exchange processes. Social exchanges entail unspecified obligations and trust (Blau, 1964). Trust is a key element in the emergence and maintenance of social exchange relationships (Holmes, 1981), and reciprocity is a key norm sustaining social-exchanges (Gouldner, 1960). This dissertation posits that both cognitive and affective trust play roles in social exchange processes. However, their differences reside in the content and nature of exchanges. Cognitive trust tends to revolve around task-related exchanges at work, whereas affective trust captures socioemotional exchanges (Dirks & Ferrin, 2002). Moreover, cognitive trust motivates one to repay favorable treatment with efforts that are commensurate with what is received, whereas affective trust may motivate one to go the extra mile by investing more effort in developing a close relationship.

Affective trust overlaps with the concept of trust depicted in the social-capital literature. Social capital refers to the sum of resources embedded within, available through, and derived from the network relationships possessed by an individual or social unit (Nahapiet & Ghoshal, 1998). Research streams pertaining to social capital often equate trust with social capital or at

least describe it as part of social capital (Adler & Kwon, 2002). I suggest that affective trust represents a relational facet of social capital, a notion which is shared by others (Bolino, Turnley, & Bloodgood, 2002; Krackhardt, 1992; Nahapiet & Ghoshal, 1998). Affective trust emerges when people make mutual investments in their relationships, express genuine care and concern for another party's welfare, and believe that these sentiments will be reciprocated (McAllister, 1995). Simply put, affective trust is a relational attribute that fits well in the context of social capital.

Affective trust also corresponds more with strong-tie relationships, whereas cognitive trust is more likely to operate in weak-tie relationships. The strength of a tie involves a combination of the amount of contact time, emotional intensity, intimacy, and reciprocity of favors and obligations (Granovetter, 1973). Weak ties refer to “direct relationships between two actors at the low end of the tie strength continuum that involve relatively infrequent interactions, comparatively low emotional closeness, and one-way exchanges”; strong ties can be defined as “direct relationships that involve relatively frequent interactions, high emotional closeness, and reciprocity” (Perry-Smith & Shalley, 2003, pp. 92-93). Because rationally judging whether another party is trustworthy does not necessarily entail intimacy or a two-way emotional investment, a weak tie is sufficient for establishing cognitive trust. In contrast, affective trust is better nourished in strong-tie relationships.

Researchers have recognized the risks involved in building strong ties, which require considerable investment in establishing and maintaining relationships, and may not be cost-efficient in certain situations. Further, such ties may overembed actors in a relationship, resulting in parochialism and inertia (Adler & Kwon, 2002). Strong solidarities might cause actors to be blind to new ways of doing things. Alternatively, weak ties may have some advantages over

strong ties. Unlike strong ties that are established on shared personal similarities, weak ties may be built to serve task-related needs and connect individuals with diverse backgrounds. For example, as compared to strong-tie relationships, the benefits of weak-tie relationships have been demonstrated in superior-peer knowledge transfer (Levin & Cross, 2004), enhancing creativity (Perry-Smith & Shalley, 2003), sharing job-related information (Shah, 1998), and completing tasks in a shorter period of time (Hansen, 1999). Given these benefits, cognitive trust embedded in weak ties may be sufficient for favorable outcomes in certain circumstances (Bouty, 2000; Hansen, 1999; Uzzi, 1999), whereas affective trust embedded in strong ties may be necessary in others. This implies either cognitive or affective trust could underlie effective relationships depending on the needs involved.

In short, these two dimensions reflect different ways in which trust judgments may be formed. Dirks and Ferrin (2002) have described these differences in the context of interpersonal trust. The affective base is typically reflected in perceptions that the referent will make sacrifices for the trustor and will demonstrate concern about the trustor's welfare, particularly because of their unique relationship. In contrast, the cognitive base is typically reflected in beliefs that a referent is reliable, truthful, and fair. This dimension does not connote that a trustor has a special relationship with a referent, but rather that a referent would act in expected fashion regardless.

To date, only a handful of studies have considered affective as well as cognitive bases of trust. In Johnson-George and Swap's (1982) lab experiments using undergraduate students, two trust subscales emerged: reliableness and emotional trust. Their laboratory studies showed that interpersonal trust involves two bases that can be measured independently. Studying married couples, Rempel, Holmes, and Zanna (1985) revealed that trust has a basis in emotional security, as well as in dependability and predictability. These trust bases both contributed to the marriage

partnership. A study conducted by McAllister (1995) concentrated on cognitive and affective trust in peer professional relationships. In this study, the two bases of peer trust were reported to be distinctive and have differential antecedents and outcomes. Most recently, the distinction between cognitive and affective aspects of trust surfaced in Webber and Klimoski's (2004) study of the interpersonal relationships between project managers and clients. Although the multidimensionality of trust has been recognized, prior studies have not concentrated on employee trust within an organizational context. This dissertation aims to explore the two trust bases from the standpoint of subordinate within organizations.

Cognitive and affective trust can exist independently of each other, but may also coexist between a trustor and a trustee. Some authors have expressed the notion that cognitive bases may be salient in the early stage of a trust relationship, which over time may become more affectively-based (McAllister, 1995; Nicholson et al., 2001). The point is that the existence of one base does not obviate the other. As Kramer (1999) stated, recognizing that rational choice and relational trust perspectives project fundamentally different images of trust helps "avoid thinking of the disparity between them as reflecting conflict between mutually incompatible models of choice (i.e., that trust is either instrumental and calculative or social and relational). Rather, a more useful approach is to move in the direction of developing a contextualist account acknowledging the role of both calculative considerations and social inputs in trust judgments and decisions" (p. 574). For instance, to understand the dynamics of project manager-client trusting relationships, Webber and Klimoski (2004) developed a grid depicting different levels of cognitive and affective trust—"skepticism," which describes low cognitive trust and low affective trust; "calculated risk," which describes high cognitive trust and low affective trust; "blind faith," which describes low cognitive trust and high affective trust; and "commitment,"

which describes high cognitive trust and high affective trust. By the same token, to understand the dynamics of trusting relationships in a workplace, I examined both aspects of trust in this dissertation. Studying both bases provides an opportunity to capture possibilities of how cognitive and affective bases each constitutes trust, and allows for the investigation of their potential differing relations with other variables.

### Trust Foci in an Organization

Recent work has recognized the importance of pointing out specific foci of trust. Dirks and Ferrin's (2002) meta-analysis on trust in leadership reveals that people do distinguish between individual leaders and overall collective authority when forming trust perceptions. They lamented, however, that there has been little effort directed at understanding differences among referents of trust. Despite the fact that trust referents play an integral role within organizations, there has been an absence in organizational behavior research regarding the referent others (Shah, 1998).

A few studies have attempted to fill this void. Tan and Tan (2000) found that trust in one's supervisor and trust in organization, though significantly correlated, had different sets of antecedents and outcomes. They recommended that future research explore the relationships among trust in management, trust in one's supervisor, and trust in coworkers. Elsewhere, Butz, Dietz, and Konovsky's (2001) research observed an interaction effect wherein trust in one's supervisor had a significant effect on job satisfaction only when trust in management was low. Although caution needs to be exercised in interpreting their results due to the relatively small sample size ( $n = 82$ ), this interaction effect does raise the concern that, when it comes to discovering the impact of trust, considering only one referent of trust might result in finding spurious relationships or missing hidden relationships. This may be one reason why Dirks and

Ferrin's (2001) meta-analysis shows that the effects of trust on various workplace behavior and performance outcomes are weaker and less consistent than expected.

The need to depict trust foci in a more comprehensive way also resides in social-exchange dynamics. It has been long recognized that employees may have a web of exchange relationships with different constituencies at work, but few researchers have attempted to discuss constituencies among these exchange relationships. Cole, Schaninger and Harris (2002) took a timely step in this direction. They proposed an exchange network including three exchange domains—organizational (e.g., Eisenberger et al., 1986), supervisory (e.g., Liden, Sparrowe, & Wayne, 1997) and coworker (e.g., Uhl-Bien, Graen, & Scandura, 2000). In doing so, they raise some intriguing issues. Cole and colleagues suggested that interactions between the three exchange domains are expected to be primarily compensatory, meaning that a poor exchange relationship in one domain may prompt an employee to look for a more positive, offsetting relationship. Moreover, to the extent that employee needs are met through one exchange relationship, the importance of other exchange relationships may be minimized. The implications of the notion for trust theorizing are that employees may not have to trust all constituencies in an organization, and they can seek alternative trustors to fulfill their needs.

Given an exchange network, examining three major foci of employee trust simultaneously may enrich our understanding of how trust influences workplace attitudes and behavior. Employees may differ in deciding which referents to trust among three possible targets—management, supervisor, and members in the same work unit—even within the same organization. Particularly with regard to the consequences of employee trust, considering the relative importance of each target could be enlightening. Significant organizational consequences of trust might be hidden if salient trust foci are excluded from study. For example, on one hand,

personal liking could be associated with interpersonal trust of supervisor and coworkers, but may not be a strong precursor to trust in management. On the other hand, consistency in a social system plays an important role in building trust of management, but may count little in trust of one's particular supervisor and coworkers. As the referent of trust changes, factors encouraging trust, and the weight carried by each, may change accordingly. By the same token, the magnitude of relations between trust and potential outcomes could be expected to differ across foci as well.

### **Paths to Employee Trust: Considering Foci and Bases**

The dichotomy of trust bases is perhaps more fundamental, whereas the salience of trust foci is subject more to contextual influences. For this reason, this section will discuss trust bases for the three foci (management, immediate supervisor, coworkers) considered as referents of employee trust. As the contexts of the three trust foci are fairly different, the formation of trust, particularly affective trust, may vary across these foci. Some of the antecedents discussed below have appeared in studies of overall trust associated with selected foci, but little is known about their differential effects on trust bases. Some antecedents may have effects on both bases of trust. Even so, the following discussion suggests that potential trust antecedents may differ in accordance with different mechanisms through which the two trust bases emerge.

#### **Cognitive and Affective Trust in Management**

Management's effective organization of production and its actions in setting goals and strategic planning are found to be paramount in establishing its trustworthiness to employees (Hodson, 2004). Employees monitor organizational structure, policies, and processes to decide whether management is trustworthy (Costigan, Ilter, & Berman, 1998). Hence, trust in management is more institutional in nature, and has even been referred to as institutional trust (Fox, 1974). Institutional trust is tied to formal organizational structures and mechanisms, for the

latter reduce uncertainty and complexity (Luhmann, 1979; Zucker, 1986). Institutional trust draws from situational normalcy (i.e., everything seems to be in order, McKnight et al., 1998). Such trust is latent and stands beyond the day-to-day experiences that influence interpersonal trust (Luhmann, 1979). Taken together, management should be a distinctive referent of employee trust.

Studies pertaining to trust in management are fairly scarce in the OB literature (McCauley & Kuhnert, 1998). Trust in management entails the belief that management has good will toward its employees and would not do things that harm them. Logically, cognitive trust in management would tend to be based upon one's past experiences with management. Members observe policies and procedures initiated by management to determine whether it has good intentions. As such, cognitive trust among employees can be boosted through system-wide human resource practices. For example, organizational reward (Costigan et al., 1998), performance appraisal (Mayer & Davis, 1999), and employee involvement systems (Morgan & Zeffane, 2003), as well as on-the-job training and good benefits (Hodson, 2004), professional development opportunities and job security (McCauley & Kuhnert, 1992), and high-performance work systems (Zacharatos, Barling, & Iverson, 2005) have been found to enhance employee trust in management. This trust derives from employees' objective observations and rational cost-and-benefit judgments. Employees are likely to perceive a well-designed human-resource system as indicative of management's goodwill, and tend to reciprocate by placing high trust in management (Whitener, 2001). System-wide human resource practices affect everyone in an organization and tend to be perceived as initiated by management, which becomes an object of employee trust as a result.



Whereas cognitive trust of management is largely drawn from how it treats employees, the development of affective trust requires more emotional involvement from employees themselves. Affective trust of an organization can emerge when there is an emotional bond in the overall employee-employer relationship. Given that employees tend to personalize their employing organization (Levinson, 1965), it is conceivable that employment in an organization could have an emotional significance and serve as a foundation of affective trust. Genuine care and concern are typical predictors of affect-based trust, as noted in McAllister (1995). Williams (2001), however, has argued that emotional attachments by themselves can influence how people evaluate others' trustworthiness. This suggests that feelings involved in affective trust could be stimulated by an emotional attachment to an organization even if personal care is not exhibited. In this regard, organizational identification may be a key variable in fostering affective trust in management.

Organizational identification "occurs when an individual's beliefs about his or her organization become self-referential or self-defining. In other words, organizational identification occurs when one comes to integrate beliefs about one's organization into one's identity" (Pratt, 1998, p. 172). Simon (1991) observed that identification with an organization as "we," allows individuals to experience satisfaction from successes of an entire unit. Emotions may play a large role in inducing organizational identification (Pratt, 1998). Thus, organizational identification may motivate employees to work actively for an organization's goals, and the emotional bond involved in such motivation may prompt affective trust in management.

Finally, in that affective trust is relationship-oriented, it is useful to consider affective trust in management from a relationship perspective. Research suggests that, in the eyes of employees, organizational leadership at higher managerial levels is distinguished from

supervisory leadership (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Although there may be no direct contact between management and employees, the possibility of management having effects on distant echelons has been considered by researchers (Waldman & Yammarino, 1999). In this vein, Yammarino (1994) discovered that “distant leadership” effects *can* bypass hierarchical links and be felt directly at lower organizational levels. In particular, mounting empirical evidence suggests that charismatic leadership can engender trust in followers (e.g., Conger, Kanungo, & Menon, 2000). Three qualities of charismatic leaders have been shown to contribute significantly to follower trust: identifying and articulating a vision, emphasizing collective identity, and displaying exemplary behavior (Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Shamir, Zakay, Breinen, & Popper, 1998). These qualities may help establish an emotional bond between leaders and followers and, in turn, build affective trust.

Another facet of organizational leadership having ramifications for affective trust lies in the symbolism that leadership activities entail. Whereas management’s knowledge and experience are likely to boost cognitive trust among employees, its symbolic communications may stimulate affective trust. People who trust management in a cognitive manner believe that it will make sound decisions and build organizational success because of its competency. People’s affective trust in management, however, is not based solely on rational thinking, but on symbolic communications used by management. Recent content-analyses of presidents’ speeches suggested that rhetorical content serves as a primary means to develop relationships where the distance between employees and management is large (Bligh, Kohles, & Meindl, 2004; Emrich, Brower, Feldman, & Garland, 2001). Thus, how management communicates with employees (i.e., vision articulation or rhetorical skill in speech making) may be vital in facilitating employee

trust (Shamir, 1995). The confidence and enthusiasm manifested by management may emotionally induce employees to feel cared for and follow the goals envisioned by management.

In addition to verbiage, stories, and rituals used by management may also allow employees to perceive that relational structures exist between them and management. Such structures may emerge when management symbolically conveys that employees are valued and their concerns are important. For instance, management may establish focus groups in which employees express their feelings when facing organizational changes. Such sessions may prove useful in maintaining morale (Huy, 2002). Individuals may also be emotionally inspired by achievement awards, annual recognitions, orientation programs, holiday parties, and retirement luncheons (Daft, 1983; Dandridge, Mitroff, & Joyce, 1980). Therefore, I suggest that another means by which employees' affective trust in management is possibly influenced is through positive, symbolic actions.

To sum up, regarding trust in management, system-wide human resource practices and procedures are likely to enhance cognitive-based trust, and organizational identification and management's symbolic interaction are likely to enhance affective-based trust.

#### Cognitive and Affective Trust in One's Supervisor

Trust in one's supervisor involves a dyadic relationship. Due to the asymmetries of power and status inherent in this hierarchical relationship (Kramer, 1996), vulnerability and, hence, dependency is particularly salient. Relationship dependence provides an impetus for both the initiation of trust and its subsequent reciprocity, for trust violations take on greater significance for those in relatively low power or control positions (Daley, 1991). Supervisors play a central role in determining both overall and specific expectations that subordinates experience (Creed & Miles, 1996). The onus of initiating an exchange in a supervisor-subordinate relationship lies

with supervisors, and as such, supervisory behavior is an important influence on the development of trust between supervisors and employees (Whitener, Brodt, Korsgaard, & Werner, 1998).

Below, supervisory leadership, justice behavior, and leader-member exchange will be addressed as processes that help shape trust in one's supervisor.

Dirks and Ferrin's (2002) meta-analysis findings on trust in leadership show that transformational and transactional leadership have significant relationships with trust. Interestingly, in many leadership studies, trust acts as a mediating variable linking to favorable subordinate attitudes and behavior (e.g., Jung & Avolio, 2000; Pillai, Schriesheim, & Williams, 1999; Podsakoff et al., 1990). As immediate supervisors and executive leaders are not considered separately in the trust literature, the afore-mentioned finding underscores the notion that trust may often involved in supervisor-subordinate interactions.

As previously described, interpersonal affective trust demands emotional investments from both parties (i.e., trustor and trustee). Transformational supervisors demonstrate concern and care for followers, which can help establish affective trust. When subordinates know that a supervisor sincerely cares for them, they are likely to reciprocate by investing attention and effort in the relationship. Over time, strong emotional bonds can emerge in a subordinate-supervisor relationship, and then affective trust will be established between the two parties. In contrast, supervisors using transactional leadership styles tend to elicit cognitive trust from followers (Jung & Avolio, 2000; Meyerson, Weick, & Kramer, 1996). Cognitive trust does not require the relationship to go beyond what is prescribed in contracts. For this reason, transactional supervisors are more likely to build cognitive trust, in that they are seen as being consistent and reliable by executing explicit exchanges with subordinates.

Fairness is another supervisory behavior considered essential for building trust. Previous research has consistently supported that perceptions of fairness in general, and procedural justice in particular, are paramount in the process of building employee trust (e.g., Folger & Konovsky, 1989; Korsgaard, Schweiger, & Sapienza, 1995; Lind, Tyler, & Huo, 1997). Especially when outcomes are unfavorable to subordinates, procedural justice plays a crucial role in maintaining their subsequent trust and positive attitudes (e.g., Brockner & Siegel, 1996; Brockner, Siegel, Daly, Tyler, & Martin, 1997). Hence, justice perceptions matter for employees to establish trust in supervisors. Much theory and research on connections between justice and trust has treated trust as a global construct. Below, I discuss briefly the separate mechanisms through which supervisory justice may give rise to each base of trust.

Justice perceptions may contribute to building both cognitive and affective trust. The rationale for cognitive trust stems from Leventhal's (1980) six rules of procedural justice. For employees to feel treated fairly, procedures should be consistent across people and time, based on accurate information, unbiased, correctable, representative of all parties' concerns, and ethical. These characteristics signal the supervisor's trustworthy character, which serves as the basis for subordinates' cognitive trust. The theoretical grounding for affective trust can be drawn from Lind and Tyler's (1988) group-value model in which a leader's respectful treatment conveys a message to subordinates that they are valued and are an important part of the work group. This genuine care is reciprocated by employees when they start to view their relationship with a supervisor from a more personal and emotional perspective.

Leader-member exchange is another process related to subordinate trust. By definition, leader-member exchange (LMX) represents the quality of relations between a leader and member. Leader-member exchange and trust have a complex relationship (Dirks & Ferrin,

2002). Graen and Uhl-Bien (1995) proposed that LMX contains three dimensions—respect, trust, and obligation. Liden and Maslyn's (1998) multidimensional measures of LMX include dimensions of affect, loyalty, contribution and professional respect. Although LMX theory suggests that balanced efforts from supervisors and subordinates are required for quality relationships to emerge (Maslyn & Uhl-Bien, 2001), trust needs not be completely mutual (Mayer et al., 1995) or equal between two parties (Brower, Schoorman, & Tan, 2000). Thus, trust has been incorporated in LMX theory, but it is unclear which bases of trust have been examined in many LMX studies. Some high quality exchanges may be cognitively loaded, whereas others may be more affective in nature. Some LMX dimensions such as contributions and professionalism are more likely to enhance cognitive trust as opposed to affective trust. Other dimensions such as loyalty and liking increase affective trust rather than cognitive trust. At this point, one must surmise that LMX may be associated with both bases of trust.

To conclude, supervisors' transformational leadership style has more influence on affective trust, and transactional leadership style affects cognitive trust more. Justice perceptions and leader-member exchanges may relate to both cognitive and affective bases of trust.

#### Cognitive and Affective Trust in Coworkers

Work units are contexts wherein trust evaluations may occur among peers, in that employees in a work unit many times share common goals and need to work together to accomplish them. Researchers considering the exercise of control in relationships between relative equals suggest that trust is essential for long-term, nonhierarchical relationships to be sustained (e.g., Sheppard & Tuchinsky, 1996). As noted earlier, the focus of trust can be a collection of individuals as well as one person (Hosmer, 1995). Trust in peers is defined as employees' expectations regarding the behavior of their peers and has been studied in groups

(Chattopadhyay & George, 2001; Dirks, 1999; Zand, 1972). It has been argued that employees can develop a generalized trust in coworkers (Hartog, 2003). This kind of generalized trust does not rest with knowledge of particular individuals but rather with norms and behavior that are generalized to others in a social unit as a whole (Leana & Van Buren, 1999). Trust in a group of individuals is not just a collection of dyadic trust relationships or a simple average of the trust within dyads, but reflects a member's expectations and beliefs about other group members as a whole (Whitener, 1997).

Cognitive trust in coworkers may be established on the basis of one's rational assessment of their characteristics. Coworker characteristics considered may range from professional capability to behavioral predictability. Butler's (1991) ten conditions for enhancing trust including competency, consistency, discreteness, fairness, and integrity may constitute cognitive trust in fellow coworkers. In a similar vein, a recent study by Jackson and LePine (2003) showed that peer helping, an indication of trusting one's peers, could be hindered if a peer's performance deficiencies were caused by low cognitive ability, lack of conscientiousness, and job inexperience. This kind of trust-related evaluation seems cognitive in nature, and thus coworkers' ability and competence are reasonably presumed to impact the development of cognitive trust.

Cognitive trust in coworkers can also be reinforced when individuals are held accountable for their behavior and performance. When performance evaluations and subsequent rewards are group-based, the tendency of some employees to engage in social loafing increases. Social loafing occurs when some group members reduce their efforts in accomplishing group projects, assuming that others will pick up the slack. Concerns about social loafing could be an obstacle for generating cognitive trust among peers (Huff, Cooper, & Jones, 2002; Zand, 1972).

If some coworkers are concerned about being taken advantage of by others, they may also exert less effort toward task accomplishment (Dirks, 1999), because their attention and energy become diverted toward monitoring others. One means of preventing this phenomenon from occurring is to increase employee accountability. Defined as “the extent to which a person’s behavior is observed and evaluated by others, with important rewards and punishments being contingent upon those evaluations” (Ferris, Mitchell, Canavan, Frink, & Hopper, 1995, p. 187), accountability can affect individuals’ behavior (Weigold & Schlenker, 1991). One effect is to encourage people to perform to expected standards. Thus, accountability serves as a mechanism reinforcing the sense of reliability among employees (Sitkin & Roth, 1993). When employees are held accountable, higher stakes for social loafing reduce the chances of opportunistic actions. Therefore, employees are more comfortable in engaging in trusting behavior toward coworkers. In this sense, accountability may serve well in bolstering cognitive trust among coworkers.

Sources of affective trust in coworkers may stem from frequent social interactions and identification with work-unit members. Where the interconnectedness of tasks requires interdependence among members, interpersonal connections may be strong, and thus affective trust is facilitated through work communication. Trust developed through frequent contacts engenders emotional closeness (Burt & Knez, 1996). Some work units, however, may not always have common tasks requiring intensive communication among members. In some situations, the frequency of social interactions seems to decide the strength of interpersonal connections and affective trust among coworkers. Previous studies have shown that trusting relationships can evolve from more frequent social interactions (e.g., Gulati, 1995). It has also been reported that individuals having greater opportunities to interact with one another socially tend to have more positive relationships characterized by interpersonal liking (Insko & Wilson, 1977; Nicholson,



Compeau, & Sethi, 2001). Although a history of interactions does not guarantee an affective trust relationship, it provides an environment facilitating its formation.

Affective trust of coworkers may also be generated from identification with work-unit members. Employees may identify themselves as part of work units as a result of self-categorization processes (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987); however, little work has delved into the role that identification with peers plays in trust judgments. Brewer (1981) contended that “common membership in a salient social category can serve as a rule for defining the boundaries of low-risk interpersonal trust that bypasses the need for personal knowledge and the costs of negotiating reciprocity with individual others” (p. 356). Likewise, Kramer, Hanna, Su, and Wei (2001) argued that the willingness of individuals to engage in trust behavior in work group contexts is tied to the salience of their identification with coworkers. Williams (2001) recently proposed that affective interpersonal trust can be developed based on work group membership. This idea appears similar to what Lewicki and Bunker (1996) have labeled as identification-based trust, wherein one both knows others’ needs and preferences, and shares some of those same needs and preferences. It should be noted that it is unnecessary to assume that strong bonds exist for identity-based trust to grow; rather, collective identity provides a credible basis for believing that trust would not entail unacceptable levels of risk (Kramer, Brewer, & Hanna, 1996). For the above reasons, identity with coworkers may be thought of as serving to stimulate affective trust.

In sum, an individual’s cognitive trust of coworkers is likely to be generated from coworkers’ personal characteristics and the onus of accountability, whereas affective trust is likely to be built through frequent personal interactions and group identification.

## Principal Combinations of Trust Bases and Foci

By discussing potential antecedents to the two bases of trust within three different foci, the above section has illustrated that trust bases are discernable across foci. As explained, the theoretical rationale for distinguishing cognitive and affective trust resides in the bases from which trust is drawn. This two dimensional distinction has been supported by McAllister (1995), who found that both affective and cognitive based trust served as foundations for interpersonal trust. In this same vein, Costigan et al. (1998) considered both bases of trust in supervisor and coworkers. Using descriptive data, they revealed that the mean of trust in supervisor and the mean of trust in coworkers differed across each base of trust. This dissertation further posits that the identified dimensional differences hold true across the three selected trust foci in organizations. In organizational contexts, the primary foci of employee trust are management, one's supervisor, and one's coworkers, leading to the expectation in this dissertation that individual foci of employee trust will be distinguishable. When trust foci and bases are specified in a single study, each combination is expected to emerge in individual perceptions of trust. The general tenet underpinning this dissertation is that simultaneously considering bases and foci will advance our understanding of trust phenomena in the workplace. Recognizing this tenet, the following hypothesis is offered:

**Hypothesis 1:** Employees will distinguish among both bases and foci of trust within organizations.

The above hypothesis postulates that a fuller understanding of trust within organizations may be achieved by recognizing its bases and foci. The theoretical utility of delineating the bases and foci of trust constructs can be supported empirically by examining their relationships with other constructs in a nomological network (Bacharach, 1989; Cronbach & Meehl, 1955). A

number of unanswered questions are open for future exploration. For example, OB researchers have examined the direct effects of trust on a variety of behavioral and performance outcomes, finding uneven support for predicted relations. Explicating linkages of trust bases and foci with other constructs could provide clarification regarding such findings.

This dissertation attempts to demonstrate that differentiating among foci and bases would contribute to trust research. One means to test this assertion is to selectively reexamine trust-outcome relations from prior research where trust was defined unidimensionally or its specific referents were not given thoughtful consideration. In the succeeding sections, hypotheses are developed that concern the relationships of trust foci and bases with previously studied trust outcomes. Trust will be treated as two-dimensional in hypotheses concerning trust-outcome relations, and justifications for selecting particular outcome variables are couched within specific trust foci.

The outcome variables that have been examined can be grouped generally into two categories (see e.g., Dirks and Ferrin, 2001). One category of outcome variables is relational in nature, involving contacts and exchanges with others in a particular empirical setting. This category includes variables such as commitment, conflict, interpersonal citizenship behavior, and communication. Because management, supervisors, and coworkers are potential partners in trust relationships, they serve to determine the specific locus for these variables. More specifically, commitment will be targeted at the management level, conflict will be linked with one's supervisor, interpersonal citizenship behavior will be associated with one's coworkers and, finally, communication will be considered with both supervisor and coworkers. The other category of outcome variables is defined such that the three specified foci or relational partners are less predominant even though all could exert some influence. To sufficiently tap the outcome

phenomena, the number of trust foci is expanded to cover the broader construct domain. Such variables include job satisfaction, task performance, and attitudes about organizational change. Therefore, multiple trust foci are considered together when relationships of trust with this category of outcome variables are hypothesized.

### **Trust-Outcome Relations: Hypotheses for Selected Foci**

As noted above, the trust-outcome hypotheses are organized into two sections. In the first section, outcome variables that involve tests with particular referents of trust will be discussed. A following section will address the category of dependent variables that involve tests for all three trust referents.

With respect to trust of particular referents in workplace settings, the dimensionality of trust is the focus of investigation. A finer-grained analysis of trust bases allows for a more precise prediction of selected outcome variables. Differential predictions of trust-outcome relations within the boundary of selected referents (i.e., management, supervisor, and coworkers) should support the utility of differentiating the two trust dimensions. As noted, organizational commitment, supervisor-subordinate conflict, interpersonal citizenship behavior aimed at coworkers, and organizational communication flow will be considered as dependent variables of trust. As is discussed below, commitment, conflict and citizenship have established dimensions, making it salient for answering questions about the dimensionality of trust for specific foci. As for communication, two directions of flow are examined in this study, thus making it relevant to differentiate trust foci between supervisors and coworkers.

#### **Organizational Commitment**

As a construct describing employee-organization relationships, organizational commitment has been the subject of numerous studies. Both trust in management and

organizational commitment portray psychological relationships that employees develop with organizations, but they are conceptually distinct. Trust in management represents a willingness to be vulnerable to the management of an organization, whereas organizational commitment shows an attachment with an organization in its entirety.

Organizational commitment has been studied extensively as a multidimensional construct. Mathieu and Zajac (1990) noted that organizational commitment conceptualizations align into two basic views, attitudinal/affective and continuance/calculative commitment. Affective organizational commitment is defined as “the strength of an individual’s identification with and involvement in a particular organization. Such commitment can be generally characterized by at least three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership” (Porter, Steers, Mowday, & Boulian, 1974, p. 604). In other words, the reason that people maintain their organizational membership is because they have strong affective ties to and psychological identification with their organization (Mowday, Porter, & Steers, 1982).

The second view of organizational commitment has been labeled as continuance. In contrast to affective commitment, the continuance commitment perspective holds that continued organizational membership is a result of the accumulation of “side bets” that would be lost if one discontinues employment relations with an organization (Becker, 1960). Side bets refer to anything of value individuals have invested such as time, effort, or money that would be lost if they were to leave (Meyer & Allen, 1984). Following the work of Becker (1960), Hrebiniak and Alutto (1972) define calculative organizational commitment as “an exchange and accrual phenomenon, dependent on the employee’s perception of the ratio of inducements to

contributions and the accumulation of side bets or investments in the employing system” (p. 555). In other words, individuals stay with an organization because of what they have invested in the organization and do not wish to lose by separating themselves from it.

There is sufficient evidence suggesting that affective commitment and continuance commitment are distinctive concepts with unique antecedents and different consequences (Meyer & Herscovitch, 2001). As a result, when approaching organizational commitment, researchers routinely acknowledge these two perspectives. Given distinctions between affective and continuance commitment, it is useful to consider how they may relate to the two trust bases, especially because of parallels in their substantive dichotomy.

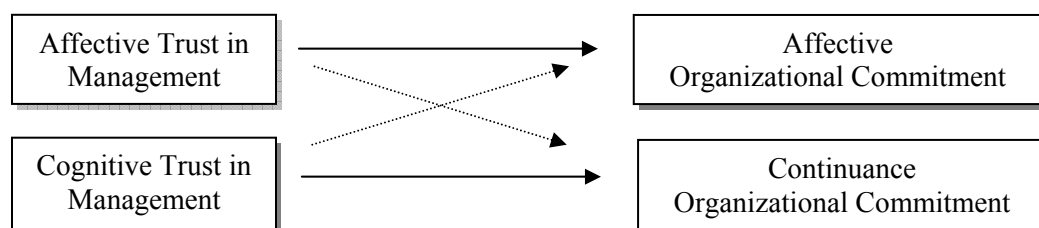
Trust in management signifies that employees believe that an organization intends to seek their best interests. According to social-exchange theory, such beliefs will lead to employees’ acceptance of an organization’s goals and values, and a strong desire to maintain membership in the organization. Hence, it has been argued social relations characterized by trust should serve as a foundation for employee commitment (Leana & Van Buren, 1999). In a recent meta-analysis concerning the consequences of trust, Dirks and Ferrin (2001) listed two studies examining trust-commitment relations. First, Brockner et al. (1997) found a positive link between trust in an employer and commitment to the employer, with the strength of the linkage being stronger under the circumstances where employees faced unfavorable outcomes. Second, in Pillai et al.’s (1999) study, trust did not influence organizational commitment. This result was expected, however, given the different foci of the two variables; trust referred to the immediate supervisors whereas commitment was centered at the organization level. As Pillai and colleagues stated, “trust in the leader may not necessary translate into greater commitment to the organization” (1999, p. 924). Their notion lends additional support to the idea that trust research should be clear about the

referent(s) of interest. Elsewhere, Cook and Wall (1980) did find a substantial correlation between trust in management and organizational commitment. Most recently, trust in an organization was found to be positively correlated with organizational commitment (Gilbert & Tang, 1998; Tan & Tan, 2000), or particularly with affective organizational commitment (George, 2003; Nyhan, 1999). Therefore, on the surface, trust in management appears to be related to organizational commitment. To date, however, the specific relationships among the dimensions of trust and commitment have not been clearly examined. Hypotheses are thus developed considering the relationships between the components of trust in management and organizational commitment.

In general, I argue that affective, rather than cognitive, trust should be more closely associated with affective commitment. Affective trust in management parallels affective organizational commitment in the sense that both dimensions touch on emotional bonds as principal reasons to be vulnerable or to be committed to an organization. By definition, affective trust in management suggests that when individuals feel emotionally secure with an organization and are confident in their relationship with the organization, they are willing to be in vulnerable situations if necessary. Affective commitment connotes that one's feelings of identification with and attachment to a work organization give rise to desires to maintain organizational membership. There is some emotional commonality in the elements leading to trust or commitment. The emotional aspect of affective trust stems from the accumulated effects of positive employee-organization relationships, whereas that of affective commitment flows from an internal identification with organizational goals and values. Therefore, it seems reasonable to expect there should be a connection between affective trust and affective commitment.

Alternatively, cognitive trust is expected to have a positive correlation with continuance commitment. Cognitive trust taps rational reasons for being willing to be vulnerable to management; the decision to trust in management is made after risk-and-return calculations. Similarly, continuance commitment captures cost-based considerations of remaining in an organization. Some research has revealed two subdimensions of continuance commitment: personal sacrifice and low alternatives (Allen & Meyer, 1996; Dunham Grube, & Castaneda, 1994; Meyer at al., 1990). The first dimension reflects commitment based on personal losses associated with leaving an organization and the second reflects commitment resulting from having few employment alternatives. Regardless of the differing contents of the two forms of continuance commitment, they both point to the core of continuance commitment—careful calculation of costs and benefits involved in leaving an organization.

Although it is predicted that there will be positive links between affective trust in management and affective commitment, and between cognitive trust in management and continuance commitment, correlations across these dimensions are possible. As discussed earlier, previous research has showed that trust in management is associated with organizational commitment. This general relation between trust and commitment implies that even the noncongruent components of the two constructs may be correlated. As illustrated in Figure 2-1, however, the relationships where the substantive bases are congruent should be stronger than where they are not. The solid line indicates a stronger, and the dotted a weaker relationship.



**Figure 2-1**  
Relationships among Dimensions of Trust in Management and Organizational Commitment



To sum up, I hypothesize the following:

**Hypothesis 2a:** Affective trust in management will be positively and significantly related to affective organizational commitment.

**Hypothesis 2b:** Cognitive trust in management will be positively and significantly related to continuance organizational commitment.

**Hypothesis 2c:** Affective trust in management will be more positively related to affective organizational commitment than cognitive trust in management will be.

**Hypothesis 2d:** Cognitive trust in management will be more positively related to continuance organizational commitment than affective trust in management will be.

#### Supervisor-subordinate Conflict

Workplace supervisor-subordinate conflict has been consistently a concern for both researchers and practitioners, but there are still knowledge gaps regarding such supervisor-subordinate interactions (Xin & Pelled, 2003). What has been most often studied is either role conflict (e.g., Schaubroeck, Ganster, Sime, & Ditman, 1993; Tsui & O'Reilly, 1989) occurring when supervisors send employees inconsistent job expectations (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), or conflict resolution approaches (e.g., Brewer, Mitchell, & Weber, 2002; De Dreu, Giebels, & Van de Vilert, 1998; Van de Vliert, Euwema, & Huismans, 1995).

Attribution theory (e.g., Kelley 1967) suggests that high trust vested in another person may reduce the likelihood of perceiving mere disagreements as conflict. Prior research findings supported the view that trust can mitigate conflict arising in various situations. For example, trust among group members was found to be negatively related to conflict (Porter & Lilly, 1996). In top management teams, intragroup trust was found to be as a key to preventing task conflict from deteriorating into relationship conflict (Simons & Peterson, 2000). In inter-organizational

exchanges, interpersonal trust was reported to have a negative linkage with conflict (Zaheer, McEvily & Perrone, 1998). Finally, conflict arising during negotiation has found to be reduced with increased trust (De Dreu et al., 1998). Extending these results to trust-conflict relations in supervisor-subordinate contexts, it appears that employees with high trust in their supervisors should tend to experience less conflict with supervisors.

The focus of supervisor-subordinate conflict in this study was conflict as perceived by subordinates. The importance of understanding how conflict is interpreted has been recognized in the conflict literature. “Before it can be managed, conflict must be acknowledged and defined by disputants. It may be difficult, however, for disputants to agree on what is in dispute in a shared conflict since they may experience, or frame, the same conflict in quite different ways. This is not to suggest that objective reality does not exist, only that disputants’ subjective experience is their reality and thus determines the nature of the conflict for them” (Pinkley & Northcraft, 1994, p. 193). In leadership research, for example, it has sometimes been suggested that leadership is in the eyes of the followers (e.g., Popper & Druryan, 2001). The same rationale can be applied to conflict situations.

When it comes to interpreting causes that contribute to intragroup conflict, a task versus relationship dichotomy has often been used to delineate disputants’ conflict framing tendencies. Intragroup conflict has been identified as either task- or relationship-related based on the work of Jehn (1995, 1997), and the validity of this taxonomy has been tested and further confirmed (De Dreu & Weingart, 2003). Intragroup task conflict occurs when there are disagreements on performance-related processes in groups, whereas intragroup relationship conflict surfaces when personal incompatibility exists among group members. Xin and Pelled (2003) have recently found that conflict framing mechanisms work similarly for group and supervisor-subordinate

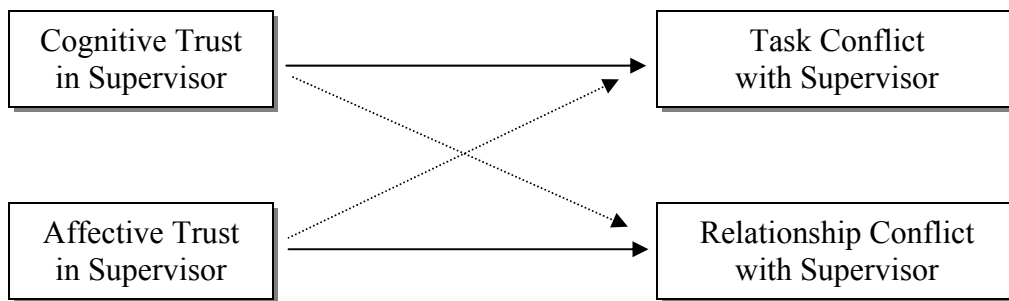
settings. Therefore, it is reasonable to assume that the causes of supervisor-subordinate conflict can fall into task-related or relationship-related categories.

Noting that trust is a core element of understanding individuals' relationships with others, Dirks and Ferrin (2001) suggested that "the same action could be interpreted and reacted to differently, depending upon the level of trust that one has in the other party" (p. 459). This argument is consistent with Simons and Peterson's (2000) finding that trust makes a difference in whether intragroup conflict is viewed as task- or relationship-related. In general, higher trust in one's supervisor may reduce conflict. As explained below, I further suggest that when the types of supervisory trust (i.e., cognitive- and affective-based) and conflict (i.e., task- or relationship-related) are specified, it is possible to postulate that this reduction may be greater where construct dimensions are congruent. Cognitive trust coincides with task conflict and affective trust with relationship conflict.

Subordinates who cognitively trust their supervisors are confident in their supervisors' knowledge and skills in handling task-related problems. Cognitive supervisory trust allows subordinates to follow their supervisors' job instructions and directions without second thoughts. This tendency reduces the chance that subordinates might propose opposing ideas or opinions on how to complete tasks at hand. With the increase of cognitive supervisory trust, there will be less task-related disagreement or arguments between subordinates and their supervisors. Thus, high cognitive supervisory trust leads to less perceived task conflict with one's supervisor. Alternatively, affective trust implies that a good interpersonal relationship is important to the involved parties. High affective supervisory trust indicates close subordinate-supervisor relations, and in such relations, there should be a decreased likelihood of experiencing interpersonal incompatibility. Characterized by interpersonal friction and antagonism,

relationship conflict may be minimized between the parties holding strong affective trust. In addition, affective trust may counteract the occurrence of negative emotions, such as uneasiness, irritation, and resentment, which tends to exacerbate the occurrence of relationship conflict (Jehn & Bendersky, 2003).

To sum up, the correlation between subordinate trust and perceived conflict with one's supervisor should be negative. What is more, as displayed in Figure 2-2, it is expected that the negative linkages where the substantive bases are congruent should be stronger (solid lines) than where they are not (dotted lines).



**Figure 2-2**  
Relationships among Dimensions of Trust in Supervisor and Conflict with Supervisor

Accordingly, I offer the following hypothesis:

**Hypothesis 3a:** Cognitive trust in one's supervisor will be negatively and significantly related to task conflict with one's supervisor.

**Hypothesis 3b:** Affective trust in one's supervisor will be negatively and significantly related to relationship conflict with one's supervisor.

**Hypothesis 3c:** Cognitive trust in one's supervisor will be more negatively related to task conflict with one's supervisor than affective trust will be.

**Hypothesis 3d:** Affective trust in one's supervisor will be more negatively related to relationship conflict with one's supervisor than cognitive trust will be.

### Citizenship Behavior toward Coworkers

Organizational citizenship behavior (OCB) contributes to the maintenance and enhancement of the social and psychological context that supports task performance (Organ, 1997). Although debates on how to categorize OCB facets have appeared in the literature, (e.g., LePine, Erez, & Johnson, 2002; Van Dyne, Cummings, & McLean-Parks, 1995), helping behavior has been identified as an important form of citizenship behavior by most researchers who have worked in this area (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Thus, I will focus on this aspect of OCB.

Helping behavior in the workplace can be targeted at an organization as a whole or targeted at individuals in an organization. For example, Williams and Anderson (1991) have suggested a broad category called OCBI, which refers to behavior that immediately benefits specific individuals and indirectly benefits an organization. Organizational researchers have adopted different terms in describing this type of citizenship behavior. For example, employees engage in interpersonal helping when they assist coworkers in their jobs whenever it is needed (Moorman and Blakely, 1995). Interpersonal facilitation, coined by Van Scotter and Motowidlo (1996), encompasses a range of interpersonal acts that help maintain the interpersonal and social context needed to support effective task performance in an organizational setting.

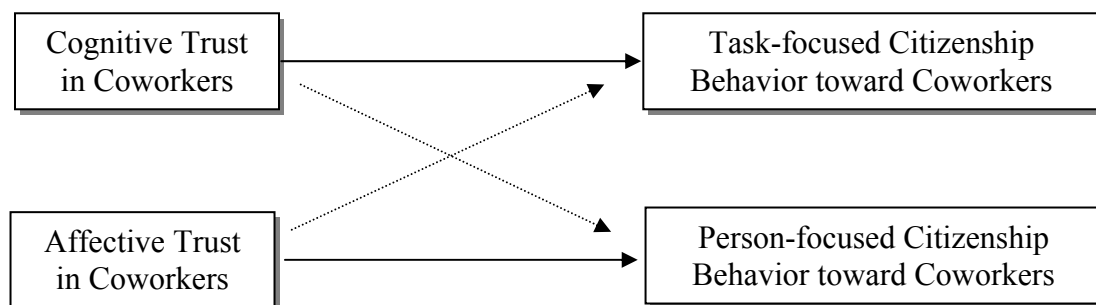
Some scholars have begun to categorize OCBI based on the internal motives of those offering help. The social psychological literature on help-giving provides some theoretical grounding for proposing two substantive dimensions of OCBI, labeled as instrumental OCBI and noninstrumental OCBI. According to this literature (e.g., DePaulo, Brown, & Greenberg, 1983), prosocial acts are instrumental if they are directly relevant to the solution of a problem at hand, or if they allow persons in need increased opportunities to work at a problem. On the other hand,

prosocial acts may be noninstrumental if they provide maintenance of self-esteem for the persons who receive help or demonstrate a concern for their welfare. Settoon and Mossholder (2002) phrased this dichotomy as task- and person-focused interpersonal citizenship behavior (ICB). Task-focused ICB is more instrumental in that it involves directly helping coworkers with workloads, and person-focused ICB is consistent with being noninstrumental in that it concerns maintaining the fabric of social relations among coworkers.

Social exchange theory suggests individuals tend to reciprocate favorable treatment with trust and further cooperative behavior. For example, trust in authority has been found to be positively associated with OCB (e.g., Deluga, 1994; Konovsky & Pugh, 1994; Pillai et al., 1999; Podsakoff et al., 1990; Robinson, 1996). Moreover, a review of the effects of trust in leadership on OCB by Dirks and Ferrin (2002) showed that the correlations of trust in leadership with altruism and courtesy were .19 and .22, respectively. In a similar vein of social exchange, I argue that trust in coworkers should correlate with ICB. ICB toward coworkers may be a behavioral manifestation of one's trust in coworkers. A key question is: How might trust dimensions mesh with types of ICB? To date, research concerning the linkage between dimensions of trust and ICB is limited. Settoon and Mossholder (2002) found that affective trust in coworkers was only associated with person-focused ICB, but not with task-focused ICB, whereas McAllister's (1995) study on peer managers found that affective trust was positively related to both affiliative citizenship behavior (similar to person-focused ICB) and assistance citizenship behavior (similar to task-focused ICB).

In this study, I argue that the nature of the working relationship may influence the type of ICB in which coworkers engage. In comparison with affective trust, cognitive trust develops more readily among structurally equivalent actors who share job-related information (Shah,

1998). Here, the shallow interdependence of work relations between such work unit members (Sheppard & Sherman, 1998) pushes their helping to be more impersonal and task centered. When work unit members are more confident in others' work competency or other characteristics, they may be more prone to exhibit task-focused ICB. This may not, however, translate into a greater desire to help coworkers deal with more personal problems. In contrast, when work unit members are confident in their interpersonal working relationships, as evident by high affective trust in coworkers, they are more likely to engage in person-focused ICB. Affective trust indicates that one has a strong relationship orientation (Clark, Ouellette, Powell, & Milberg, 1987), which drives one to care about others' well-being. Strong emotional attachments motivate individuals to exhibit genuine concern for others. Summarizing, cognitive trust in coworkers should elicit a willingness to engage in task-focused ICB. With regard to person-focused ICB, however, a high quality personal relationship with fellow workers is required. The predicted connections among coworker trust and ICB dimensions are shown in Figure 2-3. A positive association between the two constructs is expected. Furthermore, the relations where the substantive bases are congruent are expected to be stronger (solid lines) than where they are not (dotted lines).



**Figure 2-3**  
Relationships among Dimensions of Trust in Coworkers and ICB

To sum up, I hypothesize the following:

**Hypothesis 4a:** Cognitive trust in coworkers will be positively and significantly related to task-focused citizenship behavior directed toward coworkers.

**Hypothesis 4b:** Affective trust in coworkers will be positively and significantly related to person-focused citizenship behavior directed toward coworkers.

**Hypothesis 4c:** Cognitive trust in coworkers will be more positively related to task-focused citizenship toward coworkers than affective trust in coworkers will be.

**Hypothesis 4d:** Affective trust in coworkers will be more positively related to person-focused citizenship toward coworkers than cognitive trust in coworkers will be.

#### Communication Flow

As noted by various researchers (e.g., Griffin, 1967; Jablin, 1979), trust is a basic part of communication processes in organizations. How communications transpire influences trust for both receivers and senders. For example, communication openness has been investigated as an antecedent to employee judgments of supervisory trustworthiness (Korsgaard, Brodt, & Whitener, 2002; Whitener et al., 1998). On the other hand, how much one trusts another party affects how communication is perceived. Sharing information involves risk taking in a relationship (Mayer et al., 1995). As such, a higher level of trust in a work partner increases the likelihood that one will take a risk with a partner (e.g., share information and open up communication) and/or increases the amount of risk that is assumed (Dirks & Ferrin, 2001). For instance, it has been found that trust within a group affects information sharing in the group (Dirks, 1999). This study does not attempt to disentangle the cause-and-effect relation between trust and organizational communication. Rather, it takes an employee-centered perspective, and focuses on how employee trust may shape their willingness to communicate.



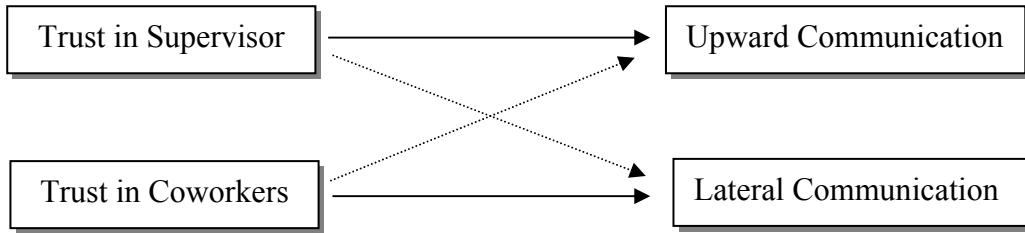
The directionality of communication—upward, downward, and lateral—has been considered in several organizational studies relevant to communication (e.g., Goris, Vaught, & Pettit, 2000). Generally, upward communication is operationalized as percentage of time an employee spends in contact with a supervisor, downward communication refers to the percentage of time an employee spends in contact with subordinates, and lateral communication is the percentage of time an employee spends in contact with peers (Roberts & O'Reilly, 1974b). Because vertical and lateral facets are most relevant for employee trust as framed in this dissertation, downward communication will not be considered.

Upward communication has been examined more than lateral (cf. Dirks & Ferrin, 2001). In studies on upward communication, the amount of information sent to supervisors has generally been found to increase with trust (O'Reilly, 1978; O'Reilly & Roberts, 1974; Roberts & O'Reilly, 1974a). Given that cognitive trust in a supervisor indicates confidence in the supervisor's ability, reliability, and integrity, it is likely that employees will be more willing to ask questions when necessary, to share work related information, and to provide more feedback to the supervisor when cognitive trust is higher. All of these tendencies should increase the information flow between a supervisor and employees. Similarly, when affective trust is evident, an employee should be willing to communicate frequently with a supervisor given the close relationships between them, and may even be proactive in communication showing concern. Taken together, the extent to which employees trust in supervisors should increase the upward flow of employee-supervisor communication.

Lateral communication among coworkers has not received sufficient attention in the management literature. It has been widely acknowledged that trust leads to cooperation and teamwork among peers (e.g., Jones & George, 1998; Mayer et al., 1995; Dirks, 1999).

Information sharing and coordination are surely part of cooperation and teamwork, thereby implying close association between trust and lateral communication. For example, frequent communication was found to be associated with trust between managers of diverse divisions within an organizational network (Becerra & Gupta, 2003). Conversely, Zand (1972) found that in low trust groups, information was often not shared. Elsewhere, a laboratory study conducted by Butler (1999) found that initial trust would result in increased quantity of information sharing. It has been posited that if cognitive trust is high among members who work in the same unit, they should feel comfortable sharing information to accomplish common tasks (Kimmel, Pruitt, Magenau, Konar-Goldband, & Carnevale, 1980). It has been similarly argued that when affective trust is high among members, they may engage in supportive communications with each other, including empathic listening and counseling. In short, the amount of lateral communication can be predicted by how much trust a focal person has in coworkers.

The interrelationship between employee trust and the two types of communication flow is illustrated in Figure 2-4 below. In general, trust leads to more communication. As the content of communication has not been studied extensively in the relevant literature, the trust-communication linkage is examined here using different foci (i.e., supervisor vs. coworkers) instead of trust bases. That is, cognitive and affective bases of trust are combined in examining its relationships with communication flow. Although the content of communication may vary given the two bases of trust, the extant literature suggests that both can increase the frequency of information sharing as well as the initiation of communication. In line with arguments presented above, trust in supervisor is expected to elicit more upward communication (solid lines) relative to trust in coworkers (dotted lines), and trust in coworkers is expected to elicit more lateral communication (solid lines) relative to trust in supervisor (dotted lines).



**Figure 2-4**  
Relationships among Dimensions of Trust in Coworkers and Communication Flow

Accordingly, I provide the following hypotheses:

**Hypothesis 5a:** Trust in one’s supervisor will be positively and significantly related to upward communication.

**Hypothesis 5b:** Trust in one’s supervisor will be more strongly related to upward communication than will be trust in one’s coworkers.

**Hypothesis 5c:** Trust in one’s coworkers will be positively and significantly related to lateral communication.

**Hypothesis 5d:** Trust in one’s coworkers will be more strongly related to lateral communication than will be trust in one’s supervisor.

#### **Trust-Outcome Relations: Hypotheses across All Foci**

The previous section considered the relationships of trust with outcome variables whose construct domain tended to mesh with specific trust foci. This section addresses associations between employee trust and more global organizational variables. As mentioned, prior studies aiming at predicting trust’s main effects have been somewhat weak and inconsistent (Dirks & Ferrin, 2001). This section will reexamine the main effects of trust on individual outcomes, determining whether more variance can be identified in outcome variables when trust foci and bases are, in turn, distinguished in a single study. The research on this matter is still in its

infancy, and no prior studies have broken down either trust foci or trust bases in investigating its effects on the global outcome variables. As this study was interested in the incremental impact of trust foci and bases, trust bases are combined when distinctions among trust foci are hypothesized, and trust foci are collapsed to test distinctions between trust bases. The more global outcomes to be examined are job satisfaction, task performance, and openness to organizational change.

### Job Satisfaction

A high level of trust is expected to give rise to increased job satisfaction. As a psychological state comprising positive expectations, trust denotes absence of anxiety and doubt. Such pleasant experiences are likely to lead to positive evaluations of one's job. Although some previous work has studied the relationship of trust with specific job satisfaction facets, such as satisfaction with the supervisor or satisfaction with the work group (e.g., Brockner et al., 1997; Ward, 1997), this study treats job satisfaction as a global work attitude because my intent is to investigate trust, rather than job satisfaction, in greater detail.

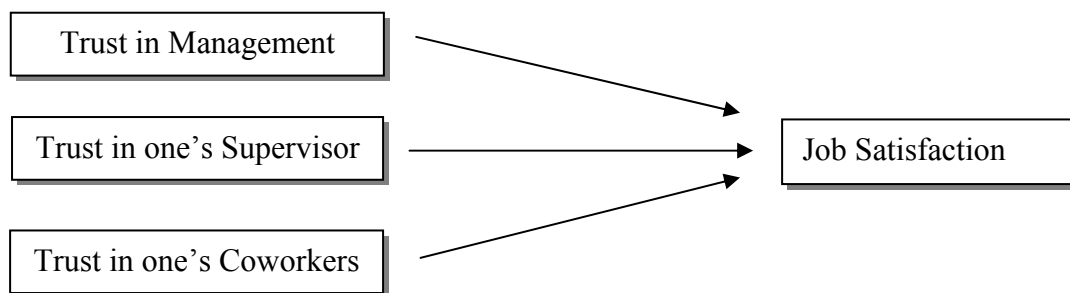
Relations between employee trust and job satisfaction have been examined in the literature and a positive connection between the two has been established (cf. Dirks & Ferrin, 2001). For example, Driscoll's (1978) research found that trust in decision makers at three hierarchical levels (i.e., head of a department, dean of a school, president of a college) was strongly associated with overall job satisfaction, as well as specific satisfaction with participation in a decision-making program. Relatedly, Muchinsky (1977) discovered that trust, as part of an organization's climate, made significant contributions to job satisfaction. More recently, Cunningham and MacGregor's (2000) results suggested that employee trust in one's supervisor acts independently of job design factors in affecting job satisfaction. In particular, trust in

leadership has found to act as a mediating variable through which leader behavior exerts influence on subordinates' job satisfaction, among other positive attitudes (e.g., Butler, Cantrell, & Flick, 1999; Podsakoff, MacKenzie, & Bommer, 1996; Rich, 1997). Dirks and Ferrin's (2002) meta-analysis also supported the view that trust in leadership is positively related to job satisfaction.

The accumulated knowledge has unfortunately been limited by the general failure to simultaneously incorporate major trust foci. As suggested, a more complete picture of employee trust may be obtained by taking various foci into account. In light of the diverse values and attitudes that people bring to the workplace, it is hard to pinpoint which referent—management, one's supervisor, or one's coworkers—will exert more influence. For example, Butz et al. (2001) found that, on one hand, trust in one's immediate supervisor and management independently predicted job satisfaction. On the other hand, they also found that trust in management seemed to override trust in one's immediate supervisor. In explanation, Butz and colleagues said that when employees trusted management, they felt confident in looking to management for solutions. This enhanced their job satisfaction regardless of how much trust they vested in their immediate supervisors. When management was not trusted, however, employees could go only to their immediate supervisors. In such circumstances, how much employees trusted their supervisors determined their job satisfaction. Whereas further studies are needed to confirm this reasoning, Butz et al.'s study suggests job satisfaction is not determined by a single trust referent. Although it is unclear which particular trust referent(s) will be more valuable for a given employee, if an individual does not trust any of the referents, then the likelihood of high job satisfaction will decrease.

Rather than hypothesizing which specific trust referent is a stronger predictor of job satisfaction, my point of emphasis is that trust across each of the three referents should explain some variance in job satisfaction. I argue that by examining major foci of employee trust, the variance in job satisfaction will be more fully captured. Figure 2-5-1 depicts how employee trust in specified foci may be associated with job satisfaction. Trust in each referent encompasses both cognitive and affective components.

**Hypothesis 6a:** Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to job satisfaction.



**Figure 2-5-1**  
Relationships of Trust Foci with Job Satisfaction

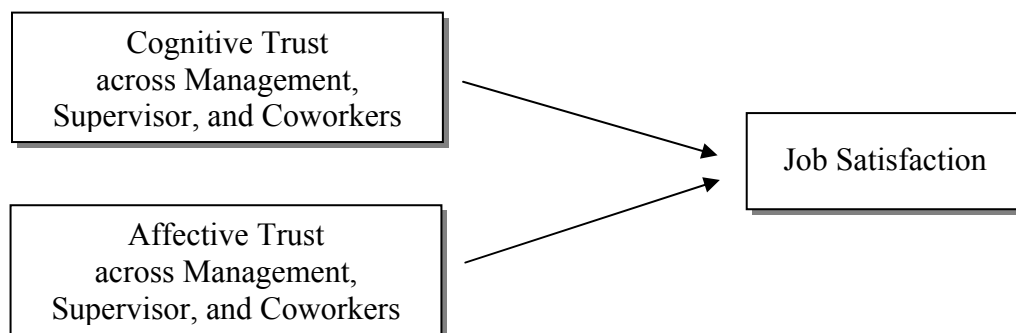
In addition to examining the comparative effects of trust foci on job satisfaction, this dissertation also argues that comparative effects of trust bases should also be investigated when accounting for the variance in job satisfaction. There has been an increased emphasis on recognizing that job satisfaction is a combination of one's evaluations, beliefs, and affective experiences with the work (Weiss, 2002). Historically, cognitive explanations of job satisfaction have received the most research attention (Weiss, Nicholas, & Daus, 1999). Research by Weiss et al. (1999), however, made it clear that job satisfaction is a function of both logical beliefs and affective experiences. These researchers have also cautioned that these two components are not

completely independent, and the process by which these two components combine to affect overall judgments is unclear.

Thus, affective trust and cognitive trust are both treated here as factors leading to job satisfaction. Examining the substantively similar bases of trust simultaneously may better reveal how trust is associated with job satisfaction. It is expected that cognitive and affective trust will each explain a significant portion of the variance in job satisfaction. As cognitive and affective trust across the three referential targets increases, it is anticipated that job satisfaction will increase accordingly. Figure 2-5-2 depicts that each trust base should account for unique variance in job satisfaction.

**Hypothesis 6b:** Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by affective trust across all three referents.

**Hypothesis 6c:** Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by cognitive trust across all three referents.



**Figure 2-5-2**  
Relationships of Trust Bases with Job Satisfaction

## Task Performance

Some trust researchers have investigated job performance when attempting to search for the benefits of trust, because job performance is obviously an important outcome. Task performance behavior is associated with the use of technical skills and job-specific knowledge. Because of limited research on trust-performance relationship, my review of the literature includes studies examining either general job performance or more specific task performance.

Some evidence suggests that vertical trust (i.e., trust in management or supervisor) plays a role in individual performance. Trust in authorities makes employees more willing to act on their words and attempt to accomplish organizational goals. For instance, trust in one's supervisor adds significantly to the prediction of employee task performance (Earley, 1986). A study conducted by Oldham (1975) indicated that among five specific supervisory characteristics, personal trust—the extent to which the subordinate perceives the supervisor as being trustworthy, dependable, and reliable—was most strongly related to performance. Trust in their managers has been found to increase salespersons' performance (Rich, 1997). Relatedly, supervisory interactional justice has been found to relate to trust in one's supervisor, which, in turn, relates to subordinates' task performance (Aryee, Budhwar, & Chen, 2002). Trust in an organization can also play a role in job performance, with undermined trust reducing performance contributions (Robinson, 1996). Therefore, trust in immediate leaders and management tends to result in better employee performance.

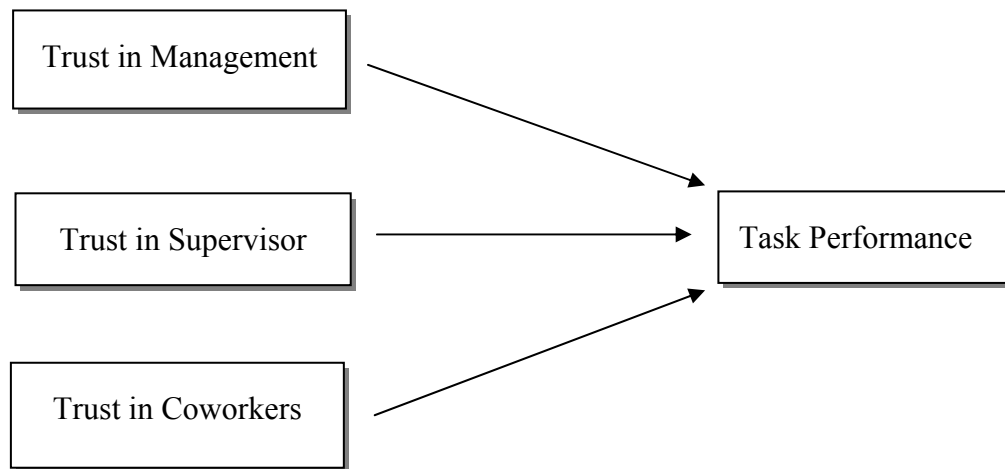
How trust in coworkers relates to performance has not been explicitly examined, but studies on peer trust in group settings offer some insights. For example, Dirks's (1999) study revealed that a high level of trust within a group allows members to direct their efforts toward common goals without distractions such as anxiety about being taken advantage of by others. As



Dirks and Ferrin (2001) noted, an individual who considers other group members dependable will find it easier to work toward goals with them. In contrast, distrust makes the work process with other coworkers more difficult. It has been found that distrustful relationships with coworkers, such as those found in hindrance networks, may thwart task-oriented behavior (Sparrowe, Liden, & Kraimer, 2001). As such, trust in coworkers is presumed to also contribute to job performance.

According to a theory of performance presented by Campbell, McCloy, Oppler, and Sager (1993), motivation is one of the three primary determinants of performance. Motivation is the combination of choice to exert effort, choice of how much effort to exert, and choice of how long to continue to exert effort. It has been noted that trust helps channel motivational factors that will enhance task performance (Dirks, 1999; Dirks & Ferrin, 2001). Hence, trustworthiness of management, one's supervisor, and one's coworkers should help one focus attention and effort at work. In Costigan et al.'s (1998) study of relations between trust and motivation, employees' affective trust as well as cognitive trust in supervisors were found to be significantly correlated with their motivation, and employees' affective trust in coworkers was also found to correlate with employees' motivation. Therefore, based on the facilitating effect of trust on individual motivation, increased trust in each referent is expected to give rise to enhanced task performance. This is stated in the following hypothesis 7a. Figure 2-6-1 portrays that trust associated with each referent will explain a significant portion of task performance. Again, trust in each referent involves combining cognitive and affective bases.

**Hypothesis 7a:** Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to task performance.



**Figure 2-6-1**  
Relationships of Trust Foci with Task Performance

Few studies examining the impact of trust in individual performance have separated trust bases when predicting performance levels. Considering trust in terms of the two bases, it appears that cognitive trust can make a difference in task performance. High confidence in supervisors' competency and character allows subordinates to accept work responsibilities, and better accomplish established goals. In his interview with basketball players, Dirks quoted a comment that clearly indicates this point: "Once we developed trust in Coach \_\_\_\_, the progress we made increased tremendously because we were no longer asking questions or were apprehensive. Instead, we were buying in and believing that if we worked our hardest, we were going to get there." (2000, p. 1009). Hence, having cognitive trust reduces the attention and effort diverted to unnecessary worry and anxiety, and therefore increases the level of task performance.

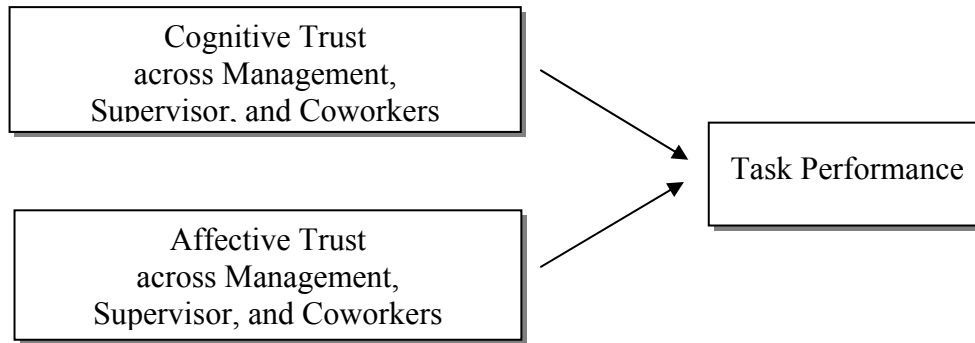
The affective component of trust is considered important as well in promoting individual task performance. Based on the findings in the motivation and emotions literature (e.g., Weiner, 1985), strong emotions often act as a motivational conduit in individual actions. Positive emotions have been argued to allow one to be more focused on work tasks; conversely, negative

emotions have been argued to shift one's attention away from tasks at hand (George & Brief, 1996). Experiences of positive feelings broaden one's action repertoires such as approaching, exploring, learning, and creating, whereas negative feelings urge one to act in more defensive ways, examples of which include escaping, attacking, and expelling (Fredrickson, 2001). More recently, Seo and colleagues (Seo, Barrett, & Bartunek, 2004) delineated a framework in which affective experiences are postulated to affect the three components of motivation: direction of effort, intensity of effort, and persistency of effort. High levels of affective trust imply that a person is emotionally engaged in tasks involving interactions with a trustee. Some positive, discrete emotions, such as joy and warmth, should grow from affective trusting work relationships. In other words, affective trust allows the work process to be more enjoyable, which in turn, can make a difference in task performance. For example, Jehn and Shah's (1997) study supported their prediction that friendship groups would have better task performance than acquaintance groups.

Taking the above information together, as cognitive and affective trust of three foci increases, so too does individual task performance. To conclude, I offer hypotheses 7b and 7c, the thrust of which is displayed in Figure 2-6-2. Taken across the three foci, each dimension of trust is expected to uniquely contribute to individual task performance.

**Hypothesis 7b:** Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by affective trust across all three referents.

**Hypothesis 7c:** Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by cognitive trust across all three referents.



**Figure 2-6-2**  
Relationships of Trust Bases with Task Performance

### Openness to Organizational Change

There is a large body of research devoted to antecedents, process, and consequences of organizational change (for a review, see Armenakis & Bedeian, 1999). This area of research has been dominated by a macro- or system-oriented focus (Miller, Johnson, & Grau, 1994; Wanberg & Banas, 2000). Although important for understanding organizational change, research with a more micro- or person-oriented focus has been limited. For example, one neglected approach is taking a psychological snapshot of individuals experiencing organizational change (Judge, Thoresen, Pucik, & Welbourne, 1999), which in turn, may affect their reactions to change. As is discussed below, trust may be an important ingredient for successful planned organizational change in that it is intertwined with one's openness to such change.

Planned organizational change is defined as "a lasting change in the character of an organization that significantly alters its performance . . . . This definition comprises two important constructs: change in character and change in performance. It also specifies that the alterations are not temporary. Rather, the organization becomes different and remains different" (Ledford, S. Mohrman, A. Mohrman, & Lawler, 1989, p. 2). Planned organizational change can be better managed if managers recognize that employees do not merely react to but also

influence change (Shapiro, Lewicki, & Devine, 1995). The construct of openness to organizational change, a willingness to support change and positive feelings that the change will be beneficial (Miller et al., 1994; Wanberg & Banas, 2000), has been used to capture this notion. Also, openness to organizational change captures individual psychological reactions (Judge et al., 1999), and is considered critical for their change readiness and subsequent successful planned change (Armenakis, Harris, & Mossholder, 1993).

Given that openness to organizational change is integral to successful planned change, the influence of trust on openness to organizational change thus warrants attention. Organizational members inevitably experience uncertainty and insecurity when encountering change. Change is a source of threat to employees' sense of control (Ashford, Lee, & Bobko, 1989), and resultant emotional reactions, such as anxiety and worry, may hinder openness toward planned changes (Miller et al., 1994; Oreg, 2003). For example, trust in management has been identified as a critical factor for successful implementation of planned organizational change (Gopinath & Becker, 2000; Korsgaard, Sapienza, & Schweiger, 2002).

The increasingly dynamic business environment has caused scholars to examine the intricacies between trust and openness to organizational change. Simons (2002) proposed that employee trust precipitates a willingness to promote and implement organizational change. In addition, some empirical evidence supports a link between trust in a specific constituency and openness to change. For example, Rousseau and Tijoriwala (1999) found that trust in management was associated with a stronger relationship between beliefs in managerial accounts (justification or excuses) for organizational change and perceived legitimacy of the accounts. Their results indicated that trust operated in two ways: one by promoting acceptance of the information provided by management and the other by reducing information-gathering efforts

from other sources. Elsewhere, Baer and Frese's (2003) study highlighted the importance of employees' feeling safe in taking risks when organizations are undergoing process innovations. In the face of the significant organizational changes accompanying team-based forms of work organization, trust in management was observed to act as a buffer to reduce employee resistance and maintain their continued goodwill (Kiffin-Petersen & Cordery, 2003). It is surprising, however, that there is scant research on how trust may affect attitudes toward organizational change, especially because the influence of trust is argued to be more pronounced when uncertainty is high (Dirks & Ferrin, 2001; Rousseau et al., 1998). Other than the above few studies, information pertaining to relations between trust and openness to organizational change has been limited.

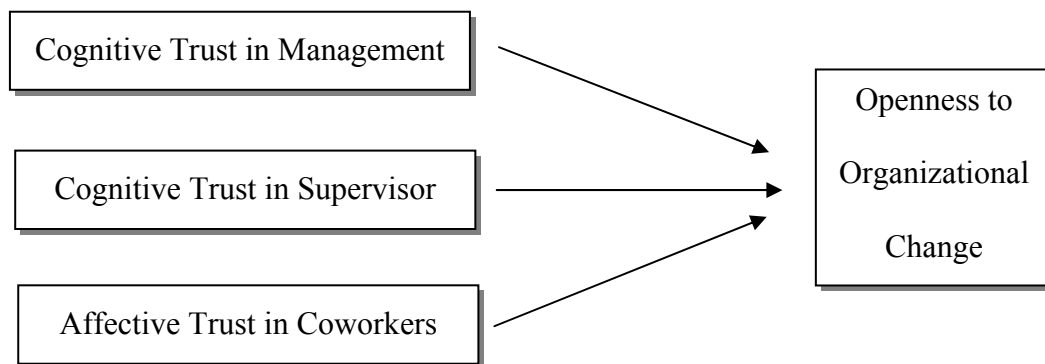
In general, researchers suggest that if employees are more trusting of other relevant parties, they are likely to welcome and embrace organizational changes. For instance, in their framework describing survivor responses to downsizing, Mishra and Spreitzer (1998) assert that trust facilitates more hopeful or obliging responses. There is also evidence suggesting that trust can influence cooperation under times of change and uncertainty (Krackhardt, 1992; Krackhardt & Stern, 1988). This is especially understandable with regard to cognition-based trust, in that confidence in others' competence and reliability allows one to accept greater risk and have an open attitude toward organizational change. Because change is often initiated by organizational authorities, it seems reasonable to presume that cognitive trust in management and the supervisor will serve such a role in enhancing openness to change.

When trust is affective in nature, however, a positive causal relation with openness to change becomes less certain. In other words, when trust is based on the quality of one's long-term relationships, especially with coworkers, concerns may arise that existing relationship

networks may be disrupted by the organizational change. Hence, individuals who have high levels of affective trust may not be open to changes occurring in the organization. As discussed previously, affective trust is consistent with social capital tenets. Regarding benefits and risks of social capital, Adler and Kwon (2002) noted that the solidarity benefits of social capital can sometimes be counter-productive. Dense and long-standing ties among employees could reduce the entry and flow of new information and ideas (Staw, Sandelands, & Dutton, 1981). Studies have shown that overembedding can cause inertia, hamper innovation (e.g., Gabbay & Zucherman, 1998; Gargiulo & Bernassi, 1999), increase resistance to change (Kern, 1998), and reduce people's willingness to adapt (Uzzi, 1997).

The above notion does not deny the benefits of interpersonal relationships to a focal actor when the change is actually implemented. Social support from one's supervisor and coworkers is an important source that helps the focal person cope with changes in a more constructive way (Tierney, 1999). Nevertheless, the focus of this study is on openness to potential change. Conceivably, when high trust rests on existing affective relationships in an organization, individuals may not be receptive to changes for fear of disrupting their relationships. There seems to be competing forces driving potential effects of trust on openness to change, as depicted in Figure 2-7 below. On one hand, trust stemming from management and supervisors' competency and reliability helps relieve anxiety on the part of employees about organizational changes. On the other hand, trust grounded in interpersonal relationships with coworkers may increase anxiety about losing these relationships. Vince and Broussine (1996) have attempted to explain this paradox partly through emotional and relational threads. I argue that to the extent affective trust captures emotional and relational issues in employees' organizational life, it may have an opposite effect on openness to change in comparison with cognitive trust. Put in another

way, cognitive and affective trust are proposed to differentially influence openness to organizational change. Picking one component over the other could lead to an erroneous understanding of the impact of employee trust on openness to organizational change relationship. Hence, considering both trust bases and foci is necessary when considering the nature of relations of trust to openness to change.



**Figure 2-7**  
Relationships of Trust with Openness to Organizational Change

According to the above rationale, I hypothesize the following:

**Hypothesis 8a:** Cognitive trust in management will be positively and significantly related to openness to organizational change.

**Hypothesis 8b:** Cognitive trust in one's supervisor will be positively and significantly related to openness to organizational change.

**Hypothesis 8c:** Affective trust in one's coworkers will be negatively and significantly related to openness to organizational change.

### **Summary**

This dissertation attempts to address the question “will distinguishing among the bases (cognitive and affective) and foci (management, immediate supervisor, and coworkers) of trust



increase the understanding of organizational behavior relevant to trust?” Toward this end, eight sets of hypotheses have been offered. For the sake of convenience, all of the hypotheses are listed in Table 2-1.

**Table 2-1**

Summary of Hypotheses

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- Hypothesis 1: Employees will distinguish among both bases and foci of trust within organizations.
- Hypothesis 2a: Affective trust in management will be positively and significantly related to affective organizational commitment.
- Hypothesis 2b: Cognitive trust in management will be positively and significantly related to continuance organizational commitment.
- Hypothesis 2c: Affective trust in management will be more positively related to affective organizational commitment than cognitive trust in management will be.
- Hypothesis 2d: Cognitive trust in management will be more positively related to continuance organizational commitment than affective trust in management will be.
- Hypothesis 3a: Cognitive trust in one's supervisor will be negatively and significantly related to task conflict with the supervisor.
- Hypothesis 3b: Affective trust in one's supervisor will be negatively and significantly related to relationship conflict with the supervisor.
- Hypothesis 3c: Cognitive trust in one's supervisor will be more negatively related to task conflict with the supervisor than affective trust will be.
- Hypothesis 3d: Affective trust in one's supervisor will be more negatively related to relationship conflict with the supervisor than cognitive trust will be.
- Hypothesis 4a: Cognitive trust in coworkers will be positively and significantly related to task-focused citizenship behavior directed toward coworkers.

**Table 2-1 (continued)**

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<u>Hypothesis 4b:</u>	Affective trust in coworkers will be positively and significantly related to person-focused citizenship behavior directed toward coworkers.
<u>Hypothesis 4c:</u>	Cognitive trust in coworkers will be more positively related to task-focused citizenship toward coworkers than affective trust in coworkers will be.
<u>Hypothesis 4d:</u>	Affective trust in coworkers will be more positively related to person-focused citizenship toward coworkers than cognitive trust in coworkers will be.
<u>Hypothesis 5a:</u>	Trust in one's supervisor will be positively and significantly related to upward communication.
<u>Hypothesis 5b:</u>	Trust in one's supervisor will be more strongly related to upward communication than will be trust in one's coworkers.
<u>Hypothesis 5c:</u>	Trust in one's coworkers will be positively and significantly related to lateral communication.
<u>Hypothesis 5d:</u>	Trust in one's coworkers will be more strongly related to lateral communication than will be trust in one's supervisor.
<u>Hypothesis 6a:</u>	Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to job satisfaction.
<u>Hypothesis 6b:</u>	Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by affective trust across all three referents.

**Table 2-1 (continued)**

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<u>Hypothesis 6c:</u>	Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by cognitive trust across all three referents.
<u>Hypothesis 7a:</u>	Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to task performance.
<u>Hypothesis 7b:</u>	Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by affective trust across all three referents.
<u>Hypothesis 7c:</u>	Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by cognitive trust across all three referents.
<u>Hypothesis 8a:</u>	Cognitive trust in management will be positively and significantly related to openness to organizational change.
<u>Hypothesis 8b:</u>	Cognitive trust in one's supervisor will be positively and significantly related to openness to organizational change.
<u>Hypothesis 8c:</u>	Affective trust in one's coworkers will be negatively and significantly related to openness to organizational change.

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### **CHAPTER 3: PRETESTING**

Different versions of trust measures have been developed over the years depending on the target of trust used in specific studies. The majority of trust research, however, simply measures overall trust without distinguishing cognitive versus affective bases. None of the extant trust instruments is adequate for capturing the six combinations of trust bases and foci expounded in this dissertation. Thus, it was necessary to develop and pretest an instrument that can assess trust bases as well as foci. The first step was to generate an employee trust item-pool and determine whether the items were understandable in terms of clarity and readability. Then, it was necessary to test the items for content validity. The surviving items were further tested in a pilot survey. Exploratory factor analyses were performed on the resulting pilot data, and some of the items were deleted. The surviving items were used in the primary survey. Based on the feedback from participants in the pilot study, the format and instructions were also refined.

#### **Measures**

An instrument estimating employee trust with specified foci and bases was developed for this dissertation. Two substantive dimensions (cognitive and affective trust) and three trust foci (management, immediate supervisor, and coworkers) were included. Considering that the participants in the pilot study worked in different organizations, for the sake of simplicity, I framed management as referring to the top levels of each organization. Using definitional guidelines of cognitive and affective trust (Dirks & Ferrin, 2002; McAllister, 1995), I developed some new measures and adapted other measures from the literature that can fit this research context. An initial pool of 44 items measuring trust was generated, with half of them being expected to reflect each base. Items were then modified to reflect the three trust foci. These items are listed in Table 3-1.

**Table 3-1**  
**Initial Item Pool for Employee Trust**

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**Cognitive Trust**

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1. I can depend on top management to meet its responsibilities. (tmcogtu1)  
I can depend on my supervisor to meet his/her responsibilities. (sucogtu1)  
I can depend on my coworkers to meet their responsibilities. (cwcogtu1)
2. I can rely on top management to do what is best at work. (tmcogtu2)  
I can rely on my supervisor to do what is best at work. (sucogtu2)  
I can rely on my coworkers to do what is best at work. (cwcogtu2)
3. Top managers follow through with commitments they make. (tmcogtu3)  
My supervisor follows through with commitments he/she makes. (sucogtu3)  
My coworkers follow through with commitments they make. (cwcogtu3)
4. Given top management's track record, I see no reason to doubt its competence. (tmcogtu4)  
Given my supervisor's track record, I see no reason to doubt his/her competence. (sucogtu4)  
Given my coworkers' track records, I see no reason to doubt their competence. (cwcogtu4)
5. I can rely on top management to show good judgment when making work-related decisions. (tmcogtu5)  
I can rely on my supervisor to show good judgment when making work-related decisions. (sucogtu5)  
I can rely on my coworkers to show good judgment when making work-related decisions. (cwcogtu5)
6. I feel comfortable with top management's decisions because it acts in a fair manner. (tmcogtu6)  
I feel comfortable with my supervisor's decisions because (s)he acts in a fair manner. (sucogtu6)  
I feel comfortable with my coworkers' decisions because they act in a fair manner. (cwcogtu6)
7. I feel completely secure with top management because of its predictability and consistency. (tmcogtu7)  
I feel completely secure with my supervisor because of his/her predictability and consistency. (sucogtu7)  
I feel completely secure with my coworkers because of their predictability and consistency. (cwcogtu7)
8. I'm confident in top management because it approaches work with professionalism and dedication. (tmcogtu8)  
I'm confident in my supervisor because (s)he approaches work with professionalism and dedication. (tmcogtu8)  
I'm confident in my coworkers because they approach work with professionalism and dedication. (tmcogtu8)

**Table 3-1 (continued)**

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9. Based on past experience, I believe the top management will keep its word.  
Based on past experience, I believe my supervisor will keep his/her word.  
Based on past experience, I believe my coworkers will keep their word.
10. In the future, I know top management will keep the promises it makes.  
In the future, I know my supervisor will keep the promises (s)he makes.  
In the future, I know my coworkers will keep the promises they make.
11. I'm confident that top management will take actions that are consistent with its words.  
I'm confident that my supervisor will take actions that are consistent with his/her words.  
I'm confident that my coworkers will take actions that are consistent with their words.
12. Top management can be counted on to make sensible work-related decisions.  
My supervisor can be counted on to make sensible work-related decisions.  
My coworkers can be counted on to make sensible work-related decisions.
13. I believe top management is dependable and reliable.  
I believe my supervisor is dependable and reliable.  
I believe my coworkers are dependable and reliable.
14. I cannot always be certain how top management is going to act from one day to another. (R)  
I cannot always be certain how my supervisor is going to act from one day to another. (R)  
I cannot always be certain how my coworkers are going to act from one day to another. (R)
15. I must constantly check on top management to see that it meets its obligations to me. (R)  
I must constantly check on my supervisor to see that (s)he meets his/her obligations to me.  
(R)  
I must constantly check on my coworkers to see that they meet their obligations to me. (R)
16. When making decisions about major issues, top management doesn't keep the interests of those involved in mind. (R)  
When making decisions about major issues, my supervisor doesn't keep the interests of those involved in mind. (R)  
When making decisions about major issues, my coworkers don't keep the interests of those involved in mind. (R)
17. Top management may not always be truthful in dealing with people at work. (R)  
My supervisor may not always be truthful in dealing with people at work. (R)  
My coworkers may not always be truthful in dealing with people at work. (R)
18. Top managers' actions in the past have made me feel vulnerable. (R)  
My supervisor's actions in the past have made me feel vulnerable. (R)  
My coworkers' actions in the past have made me feel vulnerable. (R)

**Table 3-1 (continued)**

- 
19. Top management would never gain an advantage by deceiving workers. (R)  
My supervisor would never gain an advantage by deceiving workers. (R)  
My coworkers would never gain an advantage by deceiving each other. (R)
20. Top management is honest and truthful about information I need to do the job.  
My supervisor is honest and truthful about information I need to do the job.  
My coworkers are honest and truthful about information I need to do the job.
21. I will support the decisions top managements makes given its ability and knowledge of the job.  
I will support the decisions my supervisor makes given his/her ability and knowledge of the job.  
I will support the decisions my coworkers make given their ability and knowledge of the job.
22. I see no reason to monitor top management given their work preparation.  
I see no reason to monitor my supervisor given his/her work preparation.  
I see no reason to monitor my coworkers given their work preparation.

### **Affective Trust**

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1. I feel confident that top managers will always care about my well-being. (tmafft1)  
I feel confident that my supervisor will always care about my well-being. (suafft1)  
I feel confident that my coworkers will always care about my well-being. (cwafft1)
2. I have faith in top management because it would make personal sacrifices for me if I were in need. (tmafft2)  
I have faith in my supervisor because (s)he would make personal sacrifices for me if I were in need. (suafft2)  
I have faith in my coworkers because they would make personal sacrifices for me if I were in need. (cwafft2)
3. Top management can influence me because of my emotional attachment to them. (tmafft3)  
My supervisor can influence me because of my emotional attachment to him/her. (suafft3)  
My coworkers can influence me because of my emotional attachment to them. (cwafft3)
4. If I shared my problems with top management, I know they would respond caringly and constructively. (tmafft4)  
If I shared my problems with my supervisor, I know (s)he would respond caringly and constructively. (suafft4)  
If I shared my problems with my coworkers, I know they would respond caringly and constructively. (suafft4)



**Table 3-1 (continued)**

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5. Top management wouldn't take advantage of me, given our special relationships. (tmafftu5)  
My supervisor wouldn't take advantage of me, given our special relationship. (suafftu5)  
My coworkers wouldn't take advantage of me, given our special relationships. (cwafftu5)
  6. Our sharing relationship lets me can talk freely to top management about work difficulties. (tmafftu6)  
Our sharing relationship lets me can talk freely to my supervisor about work difficulties. (suafftu6)  
Our sharing relationship lets me can talk freely to my coworkers about work difficulties. (cwafftu6)
  7. Top management has a special relationship with organizational members. We can freely share our feelings and hopes. (tmafftu7)  
I have a special relationship with my supervisor. We can freely share our feelings and hopes. (suafftu7)  
I have a special relationship with my coworkers. We can freely share our feelings and hopes. (cwafftu7)
  8. I would have to say that top management and I have made considerable emotional investments in our relationships. (tmafftu8)  
I would have to say that my supervisor and I have made considerable emotional investments in our relationships. (suafftu8)  
I would have to say that my coworkers and I have made considerable emotional investments in our relationships. (cwafftu8)
  9. Top management keeps us fully informed because they care about us.  
My supervisor keeps me fully informed because (s)he cares about me.  
My coworkers keep me fully informed because they care about me.
  10. I can discuss work problems with top management without fear of having it used against me.  
I can discuss work problems with my supervisor without fear of having it used against me.  
I can discuss work problems with my coworkers without fear of having it used against me.
  11. Given my sense of loyalty to top management, I let them influence my future in this organization.  
Given my sense of loyalty to my supervisor, I let him/her influence my future in this organization.  
Given my sense of loyalty to my coworkers, I let them influence my future in this organization.
  12. I would be willing to act based on the words of top management given our emotional bonds.  
I would be willing to act based on the words of my supervisor given our emotional bonds.  
I would be willing to act based on the words of my coworkers given our emotional bonds.

**Table 3-1 (continued)**

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13. I have positive expectations of top management because of the unique relationship I have with them.  
I have positive expectations of my supervisor because of the unique relationship I have with him/her.  
I have positive expectations of my coworkers because of the unique relationship I have with them.
14. I believe top management is truthful with me.  
I believe my supervisor is truthful with me.  
I believe my coworkers are truthful with me.
15. I feel secure with top management because our relationship is built on sincerity and mutual commitment.  
I feel secure with my supervisor because our relationship is built on sincerity and mutual commitment.  
I feel secure with my coworkers because our relationship is built on sincerity and mutual commitment.
16. I can confide in top managers knowing that they could take my feelings into account.  
I can confide in my supervisor knowing that (s)he could take my feelings into account.  
I can confide in my coworkers knowing that they could take my feelings into account.
17. I am not concerned about tensions arising between top managers and me because of our relationship. (R)  
I am not concerned about tensions arising between my supervisor and me because of our relationship. (R)  
I am not concerned about tensions arising between my coworkers and me because of our relationship. (R)
18. I feel that top management keeps my welfare in mind when making decisions affecting me.  
I feel that my supervisor keeps my welfare in mind when making decisions affecting me.  
I feel that my coworkers keep my welfare in mind when making decisions affecting me.
19. It is sometimes difficult for me to be certain that top management cares about my personal needs at work. (R)  
It is sometimes difficult for me to be certain that my supervisor cares about my personal needs at work. (R)  
It is sometimes difficult for me to be certain that my coworkers care about my personal needs at work. (R)

**Table 3-1 (continued)**

- 
20. Top management doesn't take my feelings into account when making decisions about major issues. (R)  
My supervisor doesn't take my feelings into account when making decisions about major issues. (R)  
My coworkers don't take my feelings into account when making decisions about major issues. (R)
21. Top managers show little appreciation for my future interests. (R)  
My supervisor shows little appreciation for my future interests. (R)  
My coworkers show little appreciation for my future interests. (R)
22. I'm certain that top managers will listen to my suggestions.  
I'm certain that my supervisor will listen to my suggestions.  
I'm certain that my coworkers will listen to my suggestions.
-

To determine the final pool of items that would be used in the pilot survey, the content validity of the initial pool of items was evaluated. Seven organizational behavior faculty, ten graduate students, and eight nonacademics were asked to classify the items as tapping cognitive trust, affective trust, both bases of trust, or neither base of trust, according to specified characteristics of cognitive and affective trust. The cognitive dimension reflects trust that is grounded in knowledge of a referent's prior behavior regarding attributes such as consistency, predictability, reliability, truthfulness, and fairness. The referent would be expected to act in this fashion toward everyone, including the trustor. In contrast, the affective dimension reflects trust that is grounded in one's relationship with the referent. Emotional investments lead a trustor to believe that the referent has good intentions toward, demonstrates concern for, and makes sacrifices for the trustor.

To select items that had content validity, I allowed only two dissenting votes among the evaluations. As a result, the item pool was reduced to 16 items with 8 items capturing cognitive trust and 8 affective trust. The first 8 items under each of the two trust bases in Table 3-1 are the selected items. Based on these selected 16 items, three versions were written to reflect the three targeted foci. A total of 48 items ( $8 \times 2 \times 3$ ) would be used in future factor analyses. The response format in the pilot test used 5-point anchors ranging from 1 ("strongly disagree") to 5 ("strongly agree"). A low score indicated less trust.

### **Sample**

Executive MBA students, regular MBA students currently enrolled in universities located in the southeastern U.S., and employees from a local sewing machine retailing firm participated in the pilot survey. Although these were convenient samples, many had work experience or had familiarity with organizational procedures. A total of 178 participants completed the survey.

Among the returned surveys, nineteen were completed by executive MBA students, sixteen by employees at a local firm, and the rest by regular MBA students from three universities located in the southeastern U.S. The cover letter and measures used in the pilot survey are attached in Appendix A.

### **Factor Analysis**

To examine the distinction between trust foci and bases, an exploratory factor analysis (EFA) with oblique rotation was used to assess factor loadings. There were 16 items (8 items for each dimension) measuring trust in one referent. A total of 48 items measuring trust in three referents were used in the pilot study. An exploratory factor analysis was performed on these items using the 178 pilot survey responses. The subject-to-item ratio was approximately 4. Next, factor loadings were examined as the basis for deciding the trust items that would be used in the final survey. Principle axis factoring with an oblimin rotation was used as the trust factors may have moderate intercorrelations (cf. Nunnally & Bernstein, 1994). The Kaiser criterion of retaining factors with eigenvalues greater than one was used for identifying the numbers of factors. A six-factor solution appeared as best and explained 74 percent of the variance. Table 3-2 displays the resulting rotated pattern matrix.

Guidelines from Hair, Anderson, Tatham, and Black (1998) were adopted for interpreting factor loadings: Factor loadings of .45 or above are considered significant when sample size falls between 150 and 200. As shown in Table 3-2, all the items loaded on the expected factors with few nonsignificant cross-loadings. Because all of the factor loadings met the criterion of significance, items that had low loadings relative to others were considered candidates for deletion. Cognitive trust item 6 (“I can rely on management/my supervisor/my coworkers to show good judgment when making work-related decisions”) had the lowest loadings across all

**Table 3-2**Principle Axis Factoring on Trust with Oblimin Rotation (Complete Items)

	Factor					
	1	2	3	4	5	6
tmcogtu1	<b>.710</b>	-.012	.030	.067	-.074	.078
tmcogtu2	<b>.808</b>	.058	.050	.080	-.074	-.044
tmcogtu3	<b>.760</b>	.018	.023	.135	-.018	-.057
tmcogtu4	<b>.794</b>	.052	.073	-.005	-.068	.002
tmcogtu5	<b>.703</b>	.093	-.015	.112	-.125	-.055
tmcogtu6	<b>.645</b>	<b>.352</b>	.094	-.069	-.091	-.086
tmcogtu7	<b>.715</b>	.158	.170	.124	-.053	.064
tmcogtu8	<b>.656</b>	.158	.179	-.085	-.011	.067
tmafftu1	<b>.420</b>	<b>.543</b>	.007	.085	-.052	-.024
tmafftu2	.136	<b>.769</b>	.049	-.049	-.096	-.025
tmafftu3	.073	<b>.566</b>	.038	.099	.065	.171
tmafftu4	.167	<b>.645</b>	-.145	.177	-.070	-.008
tmafftu5	.150	<b>.678</b>	.061	.061	-.040	-.012
tmafftu6	.102	<b>.678</b>	-.038	.182	.064	.066
tmafftu7	.052	<b>.777</b>	.055	.084	.069	.086
tmafftu8	-.038	<b>.842</b>	.050	.042	.067	.103
sucogtu1	.055	.032	<b>.769</b>	.084	-.050	.000
sucogtu2	.113	-.071	<b>.754</b>	.151	-.083	.018
sucogtu3	.037	.031	<b>.763</b>	.031	-.094	-.009
sucogtu4	.089	.000	<b>.793</b>	.079	-.100	-.064
sucogtu5	.058	-.015	<b>.673</b>	.257	-.070	-.012
sucogtu6	.162	-.076	<b>.631</b>	<b>.310</b>	-.029	-.003
sucogtu7	.109	.059	<b>.781</b>	.124	.070	.050
sucogtu8	.015	.006	<b>.775</b>	.152	.012	.007
suafftu1	.028	.200	<b>.355</b>	<b>.496</b>	-.084	.006
suafftu2	-.043	.189	.292	<b>.566</b>	-.105	-.066
suafftu3	-.137	.251	.173	<b>.478</b>	.076	.104
suafftu4	.136	.026	.109	<b>.760</b>	-.000	.027
suafftu5	-.071	.216	<b>.346</b>	<b>.495</b>	-.141	.009
suafftu6	.144	-.041	.209	<b>.729</b>	.064	-.025
suafftu7	.064	.028	.068	<b>.766</b>	.049	.157
suafftu8	-.113	.279	.189	<b>.589</b>	.039	.055

**Table 3-2 (continued)**Principle Axis Factoring on Trust with Oblimin Rotation (Complete Items)

	Factor					
	1	2	3	4	5	6
cwcogtu1	.030	-.030	-.032	.075	<b>.739</b>	.107
cwcogtu2	-.025	.004	.115	-.051	<b>.801</b>	.044
cwcogtu3	.016	-.089	.035	-.002	<b>.765</b>	.075
cwcogtu4	.043	.053	.015	-.003	<b>.806</b>	.070
cwcogtu5	.256	-.176	-.024	.097	<b>.670</b>	.182
cwcogtu6	.094	.033	.015	.026	<b>.733</b>	.169
cwcogtu7	.046	.049	.000	-.003	<b>.723</b>	.170
cwcogtu8	.014	.049	.141	-.091	<b>.735</b>	.096
cwafftu1	.094	.134	-.043	.097	<b>-.305</b>	<b>.509</b>
cwafftu2	.001	.126	-.167	.117	-.234	<b>.613</b>
cwafftu3	-.106	.108	-.031	.026	-.070	<b>.764</b>
cwafftu4	.130	-.088	.007	.062	-.142	<b>.775</b>
cwafftu5	.007	.045	.069	.103	-.129	<b>.672</b>
cwafftu6	.093	-.108	-.025	.094	-.131	<b>.798</b>
cwafftu7	-.062	.056	-.064	-.008	-.090	<b>.863</b>
cwafftu8	-.082	.092	.126	-.067	-.011	<b>.865</b>

three trust foci. Cognitive trust item 5 (“I feel comfortable with management’s/my supervisor’s/my coworkers’ decisions because they have always acted in a fair manner”) had relatively low loadings on two trust foci. Thus, cognitive trust item 5 and 6 were eliminated. Affective trust in supervisor item 3 (“My supervisor can influence me because of my emotional attachment to him/her”) and item 5 (“My supervisor wouldn’t take advantage of me, given our special relationship”) had the lowest factor loadings .48 and .50, respectively. Thus affective trust items 3 and 5 across all three foci were eliminated. As a result, six items in each trust factor were kept for the final survey.

A second principal-axis factor analysis with oblique rotation was performed on the retained 36 trust items. The six-factor solution accounted for 76 percent of the variance. The rotated pattern matrix is shown in Table 3-3. Overall, the factor structure improved with the reduced number of items.

Table 3-4 reports the number of cases, means, standard deviations, reliabilities, and correlations for the six trust variables. As depicted in Table 3-4, all six combinations of trust scores exhibited high levels of internal consistency with Cronbach’s alpha coefficient above .90. The mean for trust ranged from 2.75 (*s.d.* = 0.92) to 3.69 (*s.d.* = 0.98). Generally, intercorrelations among trust variables were moderate. The two bases of trust in one’s supervisor were correlated more highly ( $r = 0.74, p < 0.01$ ), as was the correlation between cognitive and affective trust in coworkers ( $r = 0.63, p < 0.01$ ). A discriminate validity test would be performed later using the major survey data to ensure that the correlated factors are sufficiently distinctive from each other. Finally, a few questions from the pilot survey were reworded for ease of understanding. The final instrument measuring trust which would be used in the study survey is presented in Appendix C.



**Table 3-3****Principle Axis Factoring on Trust with Oblimin Rotation (Reduced Items)**

	Factor					
	1	2	3	4	5	6
tmcogtu1	<b>.725</b>	-.015	.014	.088	.082	-.069
tmcogtu2	<b>.802</b>	.070	.038	.079	.083	.060
tmcogtu3	<b>.751</b>	.024	-.010	.152	.035	.080
tmcogtu4	<b>.816</b>	.063	.056	.011	.019	.024
tmcogtu7	<b>.724</b>	.145	.136	.094	.060	-.068
tmcogtu8	<b>.641</b>	.169	.174	.078	.074	-.074
mafftu1	<b>-.408</b>	<b>.544</b>	.003	.085	.027	-.006
tmafftu2	-.156	<b>.743</b>	.047	-.041	.096	.030
tmafftu4	-.146	<b>.655</b>	.136	.176	.067	.000
tmafftu6	-.081	<b>.721</b>	-.023	.164	-.062	-.051
tmafftu7	-.030	<b>.811</b>	.076	.060	-.061	.069
tmafftu8	.041	<b>.834</b>	.074	.024	-.075	-.010
sucogtu1	-.077	.010	<b>.754</b>	.119	.052	-.006
sucogtu2	-.116	.000	<b>.736</b>	.185	.100	-.002
sucogtu3	-.038	.001	<b>.750</b>	.070	.101	.011
sucogtu4	-.011	-.004	<b>.770</b>	.107	.098	.062
sucogtu7	-.113	.072	<b>.755</b>	.154	-.058	-.032
sucogtu8	-.003	.019	<b>.760</b>	.182	-.017	-.012
suafftu1	-.006	.208	<b>.340</b>	<b>.516</b>	.088	-.009
suafftu2	.067	.209	<b>.307</b>	<b>.557</b>	.094	.046
suafftu4	-.103	.045	.120	<b>.751</b>	-.004	-.037
suafftu6	-.129	-.039	.189	<b>.758</b>	-.070	-.004
suafftu7	-.043	.056	.070	<b>.761</b>	-.000	-.144
suafftu8	.120	.283	.205	<b>.564</b>	-.005	-.059
cwcogtu1	-.039	-.024	-.036	.072	<b>.736</b>	-.121
cwcogtu2	-.005	-.002	.100	-.042	<b>.801</b>	-.046
cwcogtu3	-.039	-.099	.010	.024	<b>.783</b>	-.065
cwcogtu4	-.061	.044	.013	-.027	<b>.801</b>	-.076
cwcogtu7	.087	.024	.010	-.000	<b>.654</b>	-.228
cwcogtu8	-.038	.028	.126	-.058	<b>.731</b>	-.096
cwafftu1	-.087	.144	-.040	.101	.284	<b>.524</b>
cwafftu2	.009	.138	-.166	.131	.233	<b>.611</b>
cwafftu4	-.095	-.060	.010	.075	.136	<b>.772</b>
cwafftu6	-.074	-.094	-.016	.043	.120	<b>.809</b>
cwafftu7	.083	.067	-.061	.007	.075	<b>.873</b>
cwafftu8	.083	.092	.126	-.053	.000	<b>.860</b>

**Table 3-4**Descriptive Statistics and Intercorrelations of Trust Variables (Pilot Test)

Variables	<u>M</u>	<u>SD</u>	1	2	3	4	5	6
Cognitive trust in management	3.37	.83	(.92)					
Affective trust in management	2.75	.92	.55**	(.92)				
Cognitive trust in supervisor	3.69	.98	.44**	.35**	(.95)			
Affective trust in supervisor	3.32	.99	.38**	.55**	.74**	(.94)		
Cognitive trust in coworkers	3.50	.77	.34**	.15**	.25**	.18*	(.93)	
Affective trust in coworkers	3.36	.86	.19**	.29**	.12	.26**	.63**	(.93)

Note.  $N = 178$ . Alpha coefficients are in parentheses on the diagonal.

\*  $p < .05$ . \*\*  $p < .01$ .

## **CHAPTER 4: METHODS**

After the trust measures were refined in pilot testing, data collection for hypotheses testing was conducted. In this chapter, the survey administration procedure, organizational sites, and sample characteristics are described. The measures used in the survey and their associated psychometric properties (i.e., Cronbach's coefficient alpha) are also presented in this chapter.

### **Organizational Sites**

Two regional medical centers in the Southeastern United States participated in the survey. Both medical centers were state hospitals. In hospitals, the nature of work requires individuals within departments to interact on a frequent basis to coordinate and complete their assigned tasks. This type of interdependent work environment ensures that trust among individuals is meaningful in the work environment. Departments from the medical centers that participated in the survey included finance and billing services, information technology, human resource services, facility services, and a variety of clinical units (e.g., radiology, intensive care, emergency, and nursing). Employees of the state hospitals included registered and practical nurses, lab technicians, pharmacists, data entry personnel, food service workers, accounting specialists, and maintenance personnel, and so on. The employees of the auxiliary service divisions were cafeteria workers, graphic artists, residential housing managers, and clerical workers. The variability of employee jobs allowed the survey to capture a range of individual perceptions and workplace behaviors.

### **Procedure**

Prior to survey administration, meetings with Human Resource Directors of the medical centers were conducted to describe the study and survey instruments, and to solicit comments. In the two medical centers, it was determined that "management" represented a relatively small and

well-defined group of directors and managers. Thus, employees had no difficulty understanding who comprised management or interpreting survey questions about management.

Recommendations were made, however, that the survey questions directed to one's "supervisor" be specified as one's "immediate supervisor" for the sake of consistent interpretation. Finally, appropriate methods for matching employee surveys and supervisor surveys were discussed in the meetings. It was explained that to minimize potential bias of common-method variance associated with using self-reports, survey data from both medical centers would be collected from two sources: employees themselves and their immediate supervisors.

At the first medical center, an employee identification number was used to match subordinate responses with those of their supervisors. A cover letter accompanying the survey explained the purpose of the survey and guaranteed confidentiality. It explained that the identification number placed on the questionnaire was for data matching purposes only and that only the researchers had access to individual responses. Surveys were dispersed at the monthly managers' council meeting. Those attending the meeting then assisted in distributing surveys to employees at the medical center. A week prior to the managers' council meeting, the survey project was publicized through email announcements and the medical center newsletter. Respondents had the choice to either drop off the completed questionnaires at a designated place or mail them back to the department in a postage-paid, pre-addressed envelope.

At the second medical center, the last five digits of survey participants' social security numbers were used to match non-supervisory surveys with the supervisory surveys. Survey administration at this medical center proceeded in two phases. In the first phase, a question-and-answer session concerning the survey project was conducted at the managers' council meeting. In the second phase, both surveys were dispersed at the managers' council meeting and those

attending subsequently distributed them to employees of the medical center. Each survey was accompanied by a cover letter explaining the purpose of the study and ensuring the confidentiality of the survey. The same instructions were given as those for the survey conducted in the first medical center. Cover letters to employees and supervisors are presented in Appendix B. Again, announcements publicizing the survey project were made in advance through emails and newsletters.

### **Sample Characteristics**

Statistical power to detect relationships among study variables depends on sample and effect sizes. Effect size assumptions imply that the phenomenon described in a hypothesis is present in a parent population and that data are collected randomly (Cohen, 1977). Several of the study hypotheses were tested by multiple regression analysis. More than six independent and control variables were used in the hypothesis testing. The minimum sample size for eight independent variables with a power of .80 and a medium effect size at a .01 significance level is 147 (Cohen, 1992). Moreover, a sample of 250 respondents will detect fairly small  $R^2$  (the percentage of variance accounted for in the dependent variable values of eight percent and greater with up to 10 independent variables at a significance level of .01 (Hair et al., 1998). Thus, a sample of 200 would be sufficient for testing the hypotheses in this study.

A total of 367 employee surveys and 41 packages of supervisory surveys were distributed at the first medical center. I received 150 completed employee surveys for a response rate of 41% and 17 completed packages of supervisory surveys for a response rate of 41%. There were 91 matched cases of the employee and supervisory surveys from the first medical center. Of the 150 survey respondents, 86% were female. On average, the survey respondents had been with the medical center for 8 years and were 43 years old. Similarly, the whole employee population

at this medical center was 80% female, had an average age of 43, and had an average of organizational tenure of 10 years. Thus, from age, gender, and service years, individuals who responded to the survey were not largely different from the whole population at this medical center.

A total of 497 employee surveys and 55 supervisory surveys were distributed at the second medical center. I received 203 completed employee surveys, yielding a response rate of 41%, and 30 packages of completed supervisory surveys, yielding a response rate of 55%. There were 119 matched cases of employee and supervisory surveys from the second medical center. The average age of the responding employees was 43. Their average organization tenure was 8 years, and about 83% of the responding employees were female. This demographic information did not deviate much from that of the whole employee population at this medical center: the average age was 44, the average organizational tenure was 6 years, and about 80% were female. Thus, it appeared that there was no obvious response pattern differentiating those who responded from those who chose not to respond.

Taken together, there were a total of 353 employee self-reported surveys that possibly could have been used for testing some of the hypotheses. Of the 353 employee self-reported surveys, 210 had matched supervisory ratings. The average supervisory span of control among the matched cases was 5.12. With 210 subjects and up to 12 independent variables, I expected to find a fairly strong relationship (i.e.,  $R^2 = .08$ ) with statistical power of .80 (cf. Murphy & Myors, 1999, p. 125).

Chi-square analyses revealed that there were no significant differences on respondent gender and education across the two medical centers. Significant difference, however, was found on respondent race. At the first medical center ( $n = 135$ ), 63.0% of the respondents were

Caucasian, 33.3% were African-American, and 3.7% fell into the multi-racial category. At the second medical center ( $n = 193$ ), 77.2% of the respondents were Caucasian, 21.2% were African-American, and 1.6% were multi-racial. Moreover, independent samples  $t$ -tests revealed that there were no significant differences on respondent age, department tenure (years of staying in the current department), and supervisory tenure (years of staying with the current supervisor) between the two medical centers. There was significant difference, however, across the two sites on organizational tenure ( $F = 9.90$ ,  $df = 343$ ,  $p < .01$ ) measured by the years of serving in the medical center. The average organization tenure at the first medical center was 8.1 years, whereas the average organizational tenure at the second medical center was 8.0 years.

Chi-square tests and independent samples  $t$ -tests were performed on respondent demographic and tenure information between two responding groups: those who had matched supervisory ratings ( $n = 210$ ) and those who did not ( $n = 143$ ). No significant differences were detected in gender, race, education, age, organization tenure, department tenure, and supervisory tenure across these two groups. Also, no significant differences were detected on substantive variables including cognitive and affective trust in management, affective trust in supervisor, cognitive and affective trust in coworkers, affective and continuance organizational commitment, task and relationship supervisory conflict, and job satisfaction. A significant difference was found in cognitive trust in supervisor ( $F = 5.74$ ,  $df = 351$ ,  $p < .05$ ). The mean level of this variable was 3.79 for the sample size of 143, and was 3.92 for the sample size of 210. Given these generally non-significant results, subsequent data analyses on self-reported responses were reported for the combined samples from the two medical centers ( $n = 353$ ).

Of the surveyed individuals ( $n = 353$ ), 98% were working full-time, the average organization tenure was 8.1 years, the average department tenure was 6.4 years, and the average

supervisory tenure was 3.3 years. Seventy-two percent were Caucasian and 26% were African-American. About 35.6% had high school degrees, 38.2% had college degrees, 3.8% had graduate degrees, and 22.4% had some college degrees such as vocational school degrees. About 10.7% of the surveyed employees had worked in their medical center less than one year, 37.7% between one and five years, 21.5% between five and ten years, and 30.1% more than ten years. Regarding department tenure, 13.0% had worked in their current departments less than one year, 46.1% between one and five years, 20.3% between five and ten years, and 20.6% more than ten years. As for supervisory tenure, 22.0% had worked with their current supervisors less than one year, 62.1% between one and five years, 8.9% between one and five years, and 7.0% more than ten years.

Independent samples *t*-tests were also performed comparing the following two groups: the supervisory ratings with matched subordinate self-reported responses ( $n = 210$ ) and the supervisory ratings without matched subordinate self-reported responses ( $n = 184$ ). Results indicated there were no significant differences on supervisory ratings of subordinate task performance, task-related interpersonal citizenship behavior, person-related interpersonal citizenship behavior, communication with one's supervisor, and communication with one's coworkers. The average supervisory span of control observed from the 184 supervisory responses was 5.11, which was very close to that observed from the 210 supervisory responses. These non-significance findings, along with the supervisory span of control information, suggested that subsequent analyses based on supervisory ratings with matched subordinate responses would not be biased.



## **Measures**

A five-point response format was used for all study measures. Items within each measure were averaged to obtain variable scores. A higher score indicated a higher amount of the variable for that particular respondent. A complete listing of items comprising the measures is presented in Appendix C. Employees provided self-reported data on bases and foci of trust, organizational commitment, supervisor-subordinate conflict, overall job satisfaction, and openness to organizational change. Employees were also asked to provide demographic information on age, gender, ethnicity, education, and tenure with current employer. Employees' interpersonal citizenship behavior toward coworkers (ICB), task performance, upward and lateral communication were evaluated by their supervisors.

### **Organizational Commitment**

Employees' commitment to their working organization was assessed with 10 items encompassing affective and continuance commitment. The distinction between the two dimensions resides in the impetus for commitment. Employees with strong affective commitment stay with an organization because they want to, whereas those with strong continuance commitment remain because of the absence of better alternatives (Meyer et al., 1990). These items were originally developed by Meyer and Allen (1984) and later modified by Meyer and Allen (1991). Clugston et al. (2000) shortened the 16 items to 10 items, with each dimension estimated by five items. This shortened version was used in the dissertation survey. The measure of affective commitment included such items as "I would be very happy to spend the rest of my career with this organization," and "I enjoy discussing my organization with people outside of it." Measures of continuance commitment included such items as "Right now, staying with my organization is a matter of necessity as much as desire," "I feel that I have too few options to

consider leaving this organization,” and “It would be too costly for me to leave my organization in the near future.” The response format ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha for the subscale of affective commitment was .88, and was .84 for the continuance commitment subscale.

### Supervisor-subordinate Conflict

Jehn (1994, 1995) developed items that tap intragroup task and relationship conflict. In a recent study by Xin and Pelled (2003), these items were modified so that they referred to interactions between supervisors and subordinates rather than interactions among peers. Pearson, Ensley, and Amason (2002) further estimated the construct validity of the measure. Their thorough assessment supported a 6-item version of the original 9-item measure tapping task and relationship conflict. In the dissertation survey, an eight-item measure adapted from Pearson et al. (2002) and Xin and Pelled (2003) was used. Examples of task conflict included items such as “How often do you disagree with your supervisor about how your work should be done?” and “To what extent do you have different opinions than your supervisor regarding your work tasks?” Examples of relationship conflict included such items as “How much personal friction is there between you and the supervisor?” and “How much tension is there between you and the supervisor?” The study participants were asked to rate on a 5-point Likert format ranging from 1 (“not much at all”) to 5 (“a lot”). The task conflict items yielded coefficient alpha of .87, and the relationship conflict items yielded coefficient alpha of .86.

### Citizenship Behavior toward Coworkers

The instrument estimating interpersonal citizenship behavior (ICB) developed by Settoon and Mossholder (2002) was used. Citizenship behavior among employees can be split into two categories: task-focused ICB and person-focused ICB, respectively. Task-focused ICB involves

resolving coworker problems of a more organization-oriented and of a less personal nature; person-focused ICB centers on maintaining coworker self-esteem and problems of a more friendship-grounded nature. Their confirmatory analysis supported the two-dimensional view of ICB. Five items were selected from each measure for use here. Sample items of task-focused ICB toward coworkers included items such as “Takes on extra responsibilities in order to help coworkers when things get demanding at work,” and “Helps coworkers with difficult assignments, even when assistance is not directly requested.” Sample items of person-focused ICB toward coworkers included items such as “Takes time to listen to coworkers’ problems and worries,” and “Shows concern and courtesy toward coworkers, even under the most trying business situations.” Response anchors ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha was .96 and .93 for task- and person-focused ICB items, respectively.

#### Job Satisfaction

To measure the extent to which employees are satisfied with their jobs, a three-item measure of global job satisfaction was adapted from Hackman and Oldham (1975). They were “All things considered, I am satisfied with my job,” “I like my job,” and “I am generally satisfied with the work I do in this job.” The items were rated on a continuum from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha was .84.

#### Openness to Organizational Change

The degree of employees’ openness to organizational change was assessed by a four-item measure adapted from Miller et al. (1994). Validation evidence for this measure can also be found in more recent studies (cf. Wanberg & Banas, 2000). Examples of openness to organizational change included such items as “I would be somewhat resistant to changes at the medical center (reverse-scored),” and “I would look forward to the proposed changes in my work

roles brought about by the implementation of changes at the medical center.” The response format ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha was .65. The lower internal consistency of this measure might be attributed to the reverse-coded items and the item order placement in the questionnaire (the first item was positively worded, the second negatively worded, the third positively worded, and the fourth negatively worded). Research suggests that the problems associated with negatively worded items may result from respondents’ lack of attention when reading the items, their cognitive capacity, or the level of difficulty of the rating task (Holden & Fekken, 1990).

#### Task Performance

Supervisors completed an assessment of employees’ in-role performance using a 5-item measure adapted from Williams and Anderson (1991). In-role performance behaviors are those recognized by formal reward systems and are part of the requirements set by job descriptions. Example items were “Adequately completes assigned duties” and “Meets formal performance requirements of the job.” The items were anchored on a continuum from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha was .97.

#### Communication Flow

Both the frequency and quality of upward and lateral communication were assessed. In line with Roberts and O’Reilly’s (1974) question estimating communication frequency “What percentage of the time do subordinates spend in contact with supervisors while working?”, I developed one item assessing the frequency of communication in which employees engage with their supervisors and coworkers, respectively—“I communicate frequently with my supervisor/coworkers.” Moreover, I developed another three items capturing the quality of upward and lateral communication. One item was drawn from Lee’s (1997) cooperative

communication instruments. The original item “relevant information is exchanged with my supervisor” was modified to “I exchange job relevant information with my supervisor/coworkers.” Another two items were adapted from Currall and Judge (1995). The original items “Minimize the information I give to the (counterpart boundary role persons)” and “Deliberately withhold some information when communicating with the (counterpart boundary role persons)” were modified to “I minimize the information I give to my supervisor/coworkers” and “I deliberately withhold some information when communicating with my supervisor/coworkers.” Both items were reverse scored. Response anchors ranged from 1 (“strongly disagree”) to 5 (“strongly agree”).

Two variables of communication flow were measured by employees themselves and by their corresponding supervisors. One of the two communication measures self-reported by employees was .62 (below .70). Coefficient alpha value was .85 for supervisor-rated upward communication, and was .73 for supervisor-rated lateral communication. Supervisors might have attended more carefully to negatively-worded survey items than subordinates. Because supervisor-rated communication flow scores were more reliable than those reported by subordinates, the supervisor responses were to be used in the subsequent data analyses. The means and standard deviation values for employee self-reported upward communication ( $m = 3.94, s.d. = .75$ ) and lateral communication ( $m = 3.87, s.d. = .72$ ) did not differ from the means and standard deviation values for supervisor-rated upward communication ( $m = 3.98, s.d. = .67$ ) and lateral communication ( $m = 3.91, s.d. = .55$ ), respectively. Using one source of data, therefore, should be representative of communication behaviors occurring in the medical centers.

### Trust Variables

Trust variables across different foci and bases were measured using the items developed in the pilot study. All of the trust measure scores—cognitive trust in management (coefficient alpha = .96), affective trust in management (coefficient alpha = .96), cognitive trust in supervisor (coefficient alpha = .95), affective trust in supervisor (coefficient alpha = .96), cognitive trust in coworkers (coefficient alpha = .95), and affective trust in coworkers (coefficient alpha = .95)—had acceptable reliability in this study. In addition, as some hypotheses associated with job satisfaction and task performance involved collapsing all the cognitive or affective trust items together, I examined the reliability of cognitive trust across three foci and affective trust across three foci, respectively. Cognitive trust items had a coefficient alpha of .91, and affective trust items had a coefficient alpha of .92.

### Job Interdependence

Interdependence may be a necessary condition for trust, where the interests of one party cannot be achieved without reliance upon another (Rousseau et al., 1998). The position power that management and supervisors have over employees implies that trust in authority is a meaningful concept. Given the structural equivalence existing among coworkers, however, trust in coworkers may be irrelevant if employees do not need to coordinate with others. Thus, job interdependence was measured to tap the structural relationships among coworkers. A 5-item instrument developed by Pearce and Gregersen (1991) was used in the present study. Sample items of job interdependence were as follows: “I work closely with others in doing my work” and “I frequently must coordinate my efforts with others.” The response format ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). Coefficient alpha was .85.

### Control Variables

People with different cultural background and education may vary in their propensity to trust (Mayer et al., 1995). As such, employees' demographic information, including age, gender, race, and education were used as control variables in the partial correlation and multiple regression analyses. Gender was coded such that 0 = male and 1 = female. Among the survey participants, none of them were Hispanic or Asian, and only eight of them were multi-racial. I recoded the race variable of these eight cases to be missing data. Thus, race was coded into two categories (0 = Caucasian, 1 = African-American). Education was coded into four categories (1 = High school degree, 2 = Some college, 3 = College degree, 4 = Graduate degree). In addition, it is reasonable to expect that one's trust relationships at work also depend on tenure (e.g., Becerra & Gupta, 2003). Therefore, information on tenure with their current organization, supervisor and work unit was also collected.

### Marker Variable

Of the outcome variables examined in the hypotheses, organizational commitment, task and relationship conflict with one's supervisor, job satisfaction, and openness to organizational change were self-reported from employees only. This raised a concern of potential effects of common method variance (CMV) on the hypothesized relationships between trust and these five outcomes. Common method variance is the variance that is attributable to the measurement method rather than to the constructs that the measures represent (P. M. Podsakoff, MacKenzie, Lee, & N. P. Podsakoff, 2003). I used the marker variable technique to estimate the presence of CMV in the present study. Following Lindell and Whitney's (2001) suggestion that a marker variable should be theoretically unrelated to at least one of the variables of interest and have

documented evidence of high score reliability, I placed a marker variable, creative self-efficacy, between trust and the above outcome variables in the employee questionnaire.

Creative self-efficacy is defined as the belief that one has the ability to produce creative outcomes (Tierney & Farmer, 2002). A three-item measure tapping creative self-efficacy developed by Tierney and Farmer (2002) was used in the study. A sample item is “I have confidence in my ability to solve problems creatively.” The affective orientation of creative self-efficacy allows its items to tap contaminants due to CMV that would also be expected to influence the substantive survey measures. Creative self-efficacy meets the criterion of being a marker variable in terms of semantic content, close proximity, small number of items, novelty of content, and narrowness of definition (Harrison, McLaughlin, & Coalter, 1996). Creative self-efficacy was rated using a five-point format from 1 (“strongly disagree”) to 5 (“strongly agree”). The coefficient alpha was .83.



## CHAPTER 5: ANALYSES AND RESULTS

### Analysis Strategy

#### Hypothesis 1

Hypothesis 1 posited that the six combinations of trust are distinguishable by their bases and foci. Structural equation modeling (SEM) was utilized in conducting confirmatory factor analyses to determine the distinctiveness and relatedness of the six latent trust variables.

Specifically, LISREL 8 (Jöreskog & Sörbom, 1996) was employed to assess comparative fit of a six-factor solution model to alternative solution models. This was done for two reasons. First, given that the trust variables tested in the pilot study were latent variables, the use of SEM was appropriate. Second, SEM's consideration of measurement error was particularly important for this study, as a new measure of trust was developed.

Measurement Model Fit Indices. A covariance matrix was used as input for estimation of the measurement models. The quality of the measurement models was determined by examining the commonly used fit indices that fall into three categories: overall, comparative, and incremental.

The overall fit indices of the specified measurement model included the chi-square ( $\chi^2$ ), the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993), and goodness-of-fit index (GFI; Jöreskog & Sörbom, 1986). The chi-square statistic assesses the magnitude of discrepancy between the sample and fitted covariance matrices (Hu & Bentler, 1999). The root mean square residual (RMSEA) is an estimate of the discrepancy between the model and the data adjusting for degrees of freedom. RMSEA with the value equal to or below .08 is recommended (Browne & Cudeck, 1993). Goodness-of-fit index (GFI) is an absolute fit index assessing how well a priori model reproduces the sample data (Hu & Bentler, 1999).

The expected cross-validation index (ECVI), one of the comparative fit indices, estimates how well the solution obtained with one sample will generalize to other samples, and should be interpreted in making comparisons among alternative models. Greater likelihood of generalization is indicated by a smaller ECVI value (Browne & Cudeck, 1989). The Akaike information criterion (AIC) is another comparative estimate, with a smaller value indicating better fit and greater parsimony (Hair et al., 1998). The incremental fit indices consisted of the normed fit index (NFI; Tucker & Lewis, 1973), the non-normed fit index (NNFI; Tucker & Lewis, 1973) and the comparative fit index (CFI; Bentler, 1990). An incremental fit index measures the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model (Hu & Bentler, 1999). Values of incremental fit indices exceeding .90 indicate a good fitting model.

Nested Model Comparisons. Because measurement items evoke a response toward both foci and bases of trust, the dualistic nature of the construct makes it difficult to know whether a respondent is reacting to foci, bases, or a combination of foci and bases. Following the approach employed by Clugston, Howell, and Dorfman (2000), confirmatory factor analyses of the three possible models—by foci (three-factor model), by bases (two-factor model), and by the combination of the two (six-factor model)—were performed to determine the best fitting model.

The three-factor solution model was centered on the foci of trust construct with the items measuring specific trust dimension (i.e., cognitive and affective) were all loaded on one of the three trust foci (or referents). For example, items measuring cognitive and affective trust in supervisor were both loaded on trust in supervisor. The two-factor model was centered on the dimensions of trust. Each dimension of trust encompassed all of the foci of trust. For example, items assessing cognitive trust of management, supervisor, and coworkers were all loaded on

employee cognitive trust. The six-factor solution model separated each indicator measuring a particular referent or dimension of trust, and thus was loaded on respective latent variable. The model fit indices and the chi-square differences across models were examined and compared.

Reliability and Discriminant Validity. After model comparisons, the six factors in the model were evaluated. First, the composite reliability of each construct, which is interpreted similarly to coefficient alpha, was computed to address the internal consistency issue (Fornell & Larcker, 1981). Although composite reliability and coefficient alpha are not the same, both provide similar information. A threshold value for acceptable construct reliability is 0.70. Hair et al. (1998) provides the following formula for computing construct reliability in the confirmatory factor analysis:

$$\text{Construct Reliability} = \frac{(\sum \text{standardized loadings})^2}{(\sum \text{standardized loadings})^2 + \sum \text{indicator measurement error}} \quad (1)$$

Second, the variance extracted was computed to assess the amount of variance due to measurement error within each construct. A value of 50 percent or higher is commonly used as a threshold of acceptability (Fornell & Larcker, 1981). The following formula calculates variance extracted estimates for constructs in the confirmatory factor analysis (Hair et al., 1998):

$$\text{Variance Extracted} = \frac{\sum \text{squared standardized loadings}}{\sum \text{squared standardized loadings} + \sum \text{indicator measurement error}} \quad (2)$$

Third, the indicator loadings for each construct were examined. All the indicators should have significant loadings at the  $p < .05$  level. Finally, to demonstrate that the six factors of employee trust were distinct as well as related, I performed a discriminant validity test among these six variables. If the square of the parameter estimate (correlation) between any of the two factors was less than the average variance extracted estimates of the two factors, then evidence of

discriminant validity would exist (Fornell & Larcker, 1981). If this criterion were met, discriminant validity among the six trust factors would be supported.

#### Common Method Variance

Marker variable partial correlational analysis (Lindell & Whitney, 2001) was performed in this study to determine the presence of common method variance (CMV). This partial correlation technique proceeds with selecting a marker variable that should be theoretically unrelated to at least one other substantive variables included in the study. Then the smallest observed correlation between the marker variable and any other substantive variable that is theoretically irrelevant can be assumed to be due to CMV. This analysis of marker variable with partial correlations has been supported as viable for correcting CMV (Richardson, Simmering, Minsky, & Roman, 2003).

The computational method in Lindell and Whitney (2001) was used to adjust zero-order correlations by subtracting the correlation value reflecting CMV from the correlation value between the two substantive variables. The correlation value reflecting CMV was obtained by choosing the correlation with the smallest value, which should be close to 0, among the correlations of the marker variable (i.e., creative self-efficacy) with any of the substantive variable (e.g., affective trust in coworkers, and job satisfaction) in this study. Two types of correlations using the marker variable were computed using the following formula developed by Lindell and Whitney (2001): the corrected correlations after partialing out CMV, and the disattenuated partial correlations after adjusting for scale reliability.

$$r_{Yi \cdot M} = \frac{r_{Yi} - r_S}{1 - r_S} \quad (3)$$

$$r_{Yi \cdot M} = \frac{\left( \frac{r_{Yi}}{\sqrt{r_{ii}} \sqrt{r_{YY}}} \right) - \left( \frac{r_S}{\sqrt{r_{MM}} \sqrt{r_{YY}}} \right)}{1 - \left( \frac{r_S}{\sqrt{r_{MM}} \sqrt{r_{YY}}} \right)} \quad (4)$$

In the above equation (3),  $r_{Yi \cdot M}$  is the corrected correlation, between the predictor  $i$  and the criterion variable  $Y$ , after partialing out CMV. The original correlation is represented by  $r_{Yi}$ . The smallest correlation that the marker variable has with one of the substantive variables is represented by  $r_S$ . In the above equation (4),  $r_{Yi \cdot M}$  is the disattenuated partial correlation. The reliability of the marker variable, the predictor, and the criterion variable is represented by  $r_{MM}$ ,  $r_{YY}$ ,  $r_{ii}$ , respectively. If the significance of the correlations of substantive variables was consistently reduced to nonsignificance after the partial correlation analysis, the presence of CMV would be considered serious. If this is the case, implications drawn from the same-source data in this dissertation study would be considered problematic.

### Hypothesis 2–5

To test hypothesis 2a (H2a) and hypothesis 2b (H2b), partial correlations between affective trust in management and affective organizational commitment (OC), and between cognitive trust in management and continuance OC were examined. Partial correlation was used to hold constant the effects of specified control variables. If the correlations of interest were significant with the  $p$ -value of less than or equal to .05, then H2a and H2b would be supported. Of course, this research does not rule out the possibility of cross-correlations among multiple dimensions of trust and OC—that is, affective trust might also correlate with continuance OC, and that cognitive trust might correlate with affective OC. In this case, hypothesis 2c (H2c) and hypothesis 2d (H2d) predicted that the correlations of affective trust with affective OC, and of cognitive trust with continuance OC would be greater than the other two correlations where the

substantive bases did not match. When two variables predict the same criterion variable, the comparative magnitude of two correlations can be examined by performing a *t*-test using the following formula (Guilford & Fruchter, 1973):

$$t_d = (r_{12} - r_{13}) \sqrt{\frac{(N-3)(1+r_{23})}{2(1-r_{23}^2-r_{12}^2-r_{13}^2+2r_{23}r_{12}r_{13})}} \quad (5)$$

To apply the above formula for testing H2c, for example,  $r_{12}$  would be the correlation coefficient between affective trust ( $X_2$ ) and affective OC ( $X_1$ );  $r_{13}$  would be the correlation coefficient between cognitive trust ( $X_3$ ) and  $X_1$ ; and  $r_{23}$  would be the correlation coefficient between  $X_2$  and  $X_3$ . If the value of  $t_d$  was greater than 1.64, the difference would be significant at the .05 level, lending support to H2c. The analysis for H2d was conducted in the same way.

Hypotheses 3 (a, b, c, d) were concerned with the relationships between trust in the supervisor (cognition- vs. affect-based) and supervisor-subordinate conflict (task- vs. relationship-related). H3a and H3b were tested by examining the correlation coefficients between trust variables and conflict variables. A negative and significant correlation between cognitive trust and task conflict would support H3a, and a negative and significant correlation between affective trust and relationship conflict would support H3b. H3c and H3d further posited larger correlations between the dimensions that were substantively congruent than those that were not. Using the same *t*-test explained for H2c and H2d above, if the correlation coefficient between cognitive trust and task conflict was statistically larger in an absolute sense than that between affective trust and task conflict, then support for H3c would be found. The same analytical rule was used for testing H3d.

The set of hypotheses 4 (a, b, c, d) pertained to the interrelationships between cognitive and affective trust in coworkers and task- and person-focused ICB. Specifically, stronger relations were expected of cognitive trust with task-focused ICB, and of affective trust with

person-focused ICB. The comparisons of the correlations were examined following the same procedure as used in testing H2 (a, b, c, d).

Hypothesis 5 (a, b, c, d) were concerned with the relationships of employee trust with organizational communication. Trust in a particular referent was computed by averaging across cognitive and affective items for that referent. H5a predicted a significant relationship between trust in supervisor and upward communication. H5b predicted that trust in supervisor should be more strongly related with upward communication than with lateral communication. To test H5a and H5b, the correlations of trust in supervisor with upward as well as lateral communication were examined. The comparison of correlation coefficients paralleled the procedure described in testing H2c and H2d. H5c predicted trust in coworkers should significantly link to lateral communication. H5d further predicted this link should be greater than that between trust in coworkers and upward communication. To test H5c and H5d, the correlations of trust in coworkers with upward, and with lateral communication were compared. Again, the comparison procedure was similar to the procedures testing H2c and H2d.

#### Hypothesis 6–8

Hierarchical regression analysis was used to determine the effects of trust on the three dependent variables—job satisfaction, task performance, and openness to organizational change. In the regression analyses outlined below, control variables were always entered before the substantive predictors.

Hypothesis 6a (H6a) predicted that trust in each referent (management, supervisor, coworkers) would account for unique variance in job satisfaction. H6a was tested by simultaneously regressing job satisfaction onto trust in management, trust in supervisor, and trust in coworkers. Support for H6a would be indicated by a significant squared multiple correlation

( $R^2$ ). The value of  $R^2$  represents the combined effect of the entire set of independent factors in predicting job satisfaction.

Hypothesis 6b (H6b) and hypothesis 6c (H6c) predicted that cognitive and affective trust across three foci would account for unique variance in job satisfaction. Cognitive trust across all three foci was calculated by averaging the measures of cognitive trust in management, cognitive trust in supervisor, and cognitive trust in coworkers. Similarly, affective trust was calculated by averaging across affective trust in management, in supervisor, and in coworkers. Multiple regressions were run to test these predictions. In the hierarchical regressions, job satisfaction was regressed onto affective trust across all three foci, followed by cognitive trust across all three foci. Support for H6b would be indicated if the relevant incremental coefficient of determination ( $\Delta R^2$ ) was statistically significant. The value of  $\Delta R^2$  represents the unique incremental predictive power of the independent variables. Similarly, to test H6c, cognitive trust across all three foci was entered first, and affective trust across all three foci was entered second in the regression equation. Support for H6c would be indicated by a statistically significant  $\Delta R^2$ . Hypotheses 7 (a, b, c) focused on the effect of trust on task performance. The statistical procedures for testing H7a–c resembled those for testing H6a–c.

Hypothesis 8a (H8a) and hypothesis 8b (H8b) asserted that cognitive trust in management and in the supervisor would explain a significant amount of variance in openness to organizational change, with the direction of the effects being positive. Hypothesis 8c (H8c) predicted that affective trust in coworkers would account for unique variance in openness to organizational change, with the direction of the effect being negative. A multiple regression was performed for test these hypotheses. Openness to organizational change was regressed onto cognitive trust in management, cognitive trust in supervisor, and affective trust in coworkers.



H8a and H8b would be supported when relevant coefficient parameters were significantly positive. H8c would be supported by a significantly negative coefficient parameter associated with affective trust in coworkers.

## **Results**

The data analyses proceeded in two steps. First, descriptive statistics were computed, followed by the assessment of the psychometric properties of the measurement model including all the study variables. Second, the hypotheses were tested using the analytic techniques laid out in the preceding section. The means, standard deviations, and zero-order correlations of all the study variables ( $n = 210$ ) are reported in Table 5-1. In general, the survey revealed a positive work environment as evidenced by relatively high average levels of trust scales, job satisfaction, task performance, communication, and citizenship behavior. As noted previously, job interdependence was measured to see if the construct of trust in coworkers would be relevant in the organizational setting. A relatively high level of job interdependence observed in this study ( $m = 4.28, s.d. = .63$ ) suggested that investigating trust among coworkers was reasonable. The correlation matrix of employee self-reported variables on the sample size of 353 showed the same pattern of bivariate relationships, and therefore, is not presented here.

### Assessment of Measurement Models

The properties of the measurement model were assessed using LISREL. The indicator loadings (lambdas) and estimated error variances (theta-deltas) of the latent constructs self-reported by survey participants ( $n = 353$ ) are presented in Table 5-2. The ratio of observations to the number of estimated parameters in this measurement model was somewhat low (3:1). The simulation study run by Jackson (2001) indicated that although the number of observations per estimated parameter might affect the fit indices, no practically significant effect was found on the

**Table 5 -1**  
**Descriptive Statistics and Scale Intercorrelations**

Variable	<u>M</u>	<u>SD</u>	1	2	3	4	5	6	7	8	9	10	11
1. Age	42.05	10.79											
2. Gender	.84	.37	.003										
3. Education	2.14	.93	.06	-.07									
4. Race	.27	.44	-.05	-.08	-.32**								
5. Tenure with organization	7.97	7.84	.44**	.09	.02	-.10							
6. Tenure with unit	6.22	6.86	.33**	-.04	-.04	-.03	.65**						
7. Tenure with supervisor	3.39	4.45	.24**	-.03	-.01	.02	.39**	.63**					
8. Cognitive trust in management	3.17	.99	.07	-.14	-.18*	.13	-.11	-.05	.01				
9. Affective trust in management	2.88	1.03	.03	-.11	-.09	.10	-.16**	-.05	.05	.81**			
10. Cognitive trust in supervisor	3.92	.94	.11	.02	.10	-.18*	.01	-.07	-.003	.25**	.24**		
11. Affective trust in supervisor	3.77	1.05	.11	-.05	.10	-.21**	.02	.01	.06	.27**	.34**	.85**	
12. Cognitive trust in coworkers	3.70	.86	.09	-.08	.16*	-.08	-.05	-.09	-.003	.14**	.11	.28**	.24**
13. Affective trust in coworkers	3.63	.98	.004	-.09	.11	-.04	-.11	-.04	.09	.22**	.23**	.28**	.32**
14. Affective commitment	3.36	.98	.20**	-.04	.07	-.15*	.04	.10	.13	.33**	.42**	.40**	.49**
15. Continuance commitment	3.03	1.01	.10	.06	-.28**	.07	.25**	.18**	.18*	.05	-.02	-.02	-.04
16. Task conflict with supervisor	1.67	.71	-.08	-.08	-.07	.09	.05	.12	.03	-.18*	-.15*	-.42**	-.38**
17. Relation conflict with supervisor	1.40	.68	-.11	-.07	-.05	.10	.01	.11	.06	-.15*	-.19**	-.65**	-.64**
18. Task-focused ICB	3.87	.82	-.06	.06	.21**	-.14	.02	.02	-.02	.004	.06	.29**	.33**
19. Person-focused ICB	3.86	.68	-.002	.08	.28**	-.16*	.10	.12	.07	-.08	-.04	.29**	.30**
20. Upward communication	3.98	.67	-.3	.09	.23**	-.37**	.09	.003	.09	.01	.06	.26**	.31**
21. Lateral communication	3.91	.55	-.04	.08	.28**	-.32**	.07	-.01	.09	.02	.06	.25**	.27**
22. Task performance	4.18	.63	-.14	.17*	.25**	-.12	-.01	-.004	.01	-.001	.04	.11	.16*
23. Job satisfaction	4.02	.80	.21**	-.04	-.05	-.03	.001	.04	.10	.43**	.42**	.40**	.47**
24. Openness to change	3.79	.64	-.08	.09	.28**	-.25**	-.10	-.09	-.09	-.03	-.03	.13	.13
25. Creative self-efficacy	4.02	.63	.03	-.05	.30**	-.19**	.002	.07	.06	-.06	.03	.17*	.25**

**Table 5-1 (continued)**  
Descriptive Statistics and Scale Intercorrelations

Variable	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Age													
2. Gender													
3. Education													
4. Race													
5. Tenure with organization													
6. Tenure with unit													
7. Tenure with supervisor													
8. Cognitive trust in management													
9. Affective trust in management													
10. Cognitive trust in supervisor													
11. Affective trust in supervisor													
12. Cognitive trust in coworkers													
13. Affective trust in coworkers	.76**												
14. Affective commitment	.35**	.43**											
15. Continuance commitment	-.003	-.13	.012										
16. Task conflict with supervisor	-.23**	-.23**	-.24**	-.06									
17. Relation conflict with supervisor	-.15*	-.24**	-.39**	.04	.51**								
18. Task-focused ICB	.07	.15*	.12	-.18**	-.04	-.28**							
19. Person-focused ICB	.08	.06	.17*	-.10	-.04	-.19**	.65**						
20. Upward communication	.09	.11	.19**	-.05	-.14*	-.25**	.48**	.46**					
21. Lateral communication	.08	.11	.21**	-.10	-.10	-.16*	.49**	.60**	.74**				
22. Task performance	-.03	.03	.03	-.12	-.11	-.15*	.64**	.48**	.39**	.30**			
23. Job satisfaction	.36**	.39**	.69**	.13	-.24**	-.31**	-.01	.08	.10	.12	-.07		
24. Openness to change	.11	.16*	.11	-.25**	-.08	-.08	.11	.14*	.28**	.24**	.07	.23**	
25. Creative self-efficacy	.10	.11	.25**	-.10	-.05	-.06	.18**	.13	.21**	.19**	.21**	.18**	.25**

Note. Pairwise sample size ranged from 184 to 210. \*  $p < .05$ . \*\*  $p < .01$ .

precision of the parameter estimates. Thus, this ratio was not deemed a serious concern. As shown in Table 5-2, except for the two indicators of the construct openness to organizational change, all the indicators loaded significantly on their hypothesized latent constructs. Composite reliability of openness to organizational change ( $= .64$ ) failed to reach the threshold value of  $.70$ . This estimate, combined with the low coefficient alpha ( $= .65$ ) reported earlier, confirmed that the reliability of the openness to organizational change measure was lower than desired. Overall, the measurement model fit the data well as indicated by the fit statistics ( $\chi^2 = 4024.60$ ,  $df = 1874$ ,  $p < .01$ , RMSEA  $= .06$ , NFI  $= .94$ , NNFI  $= .96$ , CFI  $= .97$ ).

The indicator loadings and estimated error variances of the latent constructs rated by focal employees' supervisors ( $n = 210$ ) are presented in Table 5-3. The latent constructs examined in this measurement model were task performance, task- and person-focused ICB, and upward and lateral communication. The ratio of observations to the number of estimated parameters was 5:1 in this confirmatory factor analysis. As displayed in Table 5-3, all the latent constructs had substantial indicator loadings except lateral communication which had two indicator loadings of  $.37$  and  $.41$ , respectively. Although these two indicator loadings were a little low, the corresponding  $t$ -values were still significant at the  $.01$  level. Moreover, estimate of the composite reliability for lateral communication ( $= .74$ ) exceeded the threshold level of  $.70$ . Results showed acceptable measurement model fit indices except for RMSEA ( $\chi^2 = 769.04$ ,  $df = 220$ ,  $p < .01$ , RMSEA  $= .12$ , NFI  $= .94$ , NNFI  $= .95$ , CFI  $= .95$ ). Although the value of root mean squared error of approximation (RMSEA) was higher than desired, it should be noted that RMSEA measures tend to be affected by sample size, whereas CFA measures are not (Rigdon, 1996). A poor RMSEA measure may be caused by a small sample.

**Table 5-2**  
**Assessment of Measurement Model (N = 353)**

Items	$\lambda$	$\theta$
<b>Cognitive trust in management</b>		
I can depend on management to meet its responsibilities.	.86	.26
I can rely on management to do what is best at work.	.90	.18
Top managers follow through with commitments they make.	.87	.24
Given management's track record, I see no reason to doubt its competence.	.92	.16
I could be able to feel safe about management because of its consistency.	.93	.13
I'm confident in management because it approaches work with professionalism.	.82	.33
<b>Affective Trust in Management</b>		
I'm confident that management will always care about my personal needs at work.	.88	.22
I have faith in management because I feel it would make sacrifices for me if I were in need.	.92	.15
If I shared my problems with management, I know they would respond with care.	.91	.16
I'm confident that I could share my work difficulties with management.	.86	.26
I'm sure I could openly communicate my feelings to management.	.88	.23
I feel secure with management because of its sincerity.	.87	.23
<b>Cognitive Trust in Supervisor</b>		
I can depend on my supervisor to meet his/her responsibilities.	.86	.25
I can rely on my supervisor to do what is best at work.	.88	.23
My supervisor follows through with commitments he/she makes.	.88	.23
Given my supervisor's track record, I see no reason to doubt his/her competence.	.88	.22
I could be able to feel safe about my supervisor because of his/her consistency.	.91	.16
I'm confident in my supervisor because (s)he approaches work with professionalism.	.86	.27

**Table 5-2 (continued)**  
Assessment of Measurement Model (N = 353)

Items	$\lambda$	$\theta$
<b>Affective Trust in Supervisor</b>		
I'm confident that my supervisor will always care about my personal needs at work.	.88	.22
I have faith in my supervisor because I feel (s)he would make sacrifices for me if I were in need.	.87	.24
If I shared my problems with my supervisor, I know (s)he would respond with care.	.88	.23
I'm confident that I could share my work difficulties with my supervisor.	.89	.21
I'm sure I could openly communicate my feelings to my supervisor.	.89	.21
I feel secure with my supervisor because of his/her sincerity.	.91	.17
<b>Cognitive Trust in Coworkers</b>		
I can depend on my coworkers to meet their responsibilities.	.83	.30
I can rely on my coworkers to do what is best at work.	.88	.22
Given my coworkers' track records, I see no reason to doubt their competence.	.88	.22
My coworkers follow through with commitments they make.	.87	.25
I could be able feel safe about my coworkers because of their consistency.	.91	.17
I'm confident in my coworkers because they approach work with professionalism.	.87	.24
<b>Affective Trust in Coworkers</b>		
I'm confident that my coworkers will always care about my personal needs at work.	.89	.21
I have faith in my coworkers because I feel they would make sacrifices for me if I were in need.	.86	.25
If I shared my problems with my coworkers, I know they would respond with care.	.89	.22
I'm confident that I could share my work difficulties with my coworkers.	.87	.24
I'm sure I could openly communicate my feelings to my coworkers.	.85	.27
I feel secure with my coworkers because of their sincerity.	.88	.23

**Table 5-2 (continued)**  
Assessment of Measurement Model (N = 353)

Items	$\lambda$	$\theta$
<b>Affective Organizational Commitment</b>		
I would be very happy to spend the rest of my career with this organization.	.70	.51
I enjoy discussing my organization with people outside of it.	.67	.55
I really feel as if this organization's problems are my own.	.71	.50
This organization has a great deal of personal meaning for me.	.86	.26
I feel a strong sense of belonging to my organization.	.90	.19
<b>Continuance Organizational Commitment</b>		
I would rather not to leave this organization because there are few employment alternatives available.	.68	.54
Right now, staying with my organization is a matter of necessity as much as desires.	.69	.53
I feel that I have too few options to consider leaving this organization.	.82	.32
Leaving would require personal sacrifice as another organization may not match the overall benefits I have here.	.67	.55
It would be too costly for me to leave my organization in the near future.	.75	.44
<b>Task Conflict with Supervisor</b>		
How many disagreements do you and the supervisor have regarding the work being done?	.77	.40
How many differences about ideas related to work you and the supervisor have to work through?	.82	.32
How many differences of opinions about work/projects are there between you and the supervisor?	.79	.37
How much conflict about work/projects is there between you and the supervisor?	.81	.35
<b>Relationship Conflict with Supervisor</b>		
How much personal friction is there between you and the supervisor?	.67	.55
How much tension is there between you and the supervisor?	.78	.39
How much anger is there between you and the supervisor?	.90	.19
How much emotional conflict is there between you and the supervisor?	.79	.37

**Table 5-2 (continued)**  
Assessment of Measurement Model ( $N = 353$ )

Items	$\lambda$	$\theta$
<b>Overall Job Satisfaction</b>		
All things considered, I am satisfied with my job.	.88	.23
I like my job.	.85	.28
I am generally satisfied with the work I do in this job.	.67	.56
<b>Openness to Organizational Change</b>		
I would consider myself to be “open” to changes at the medical center.	.38	.86
I would be resistant to changes at the medical center. (R)	.68	.53
I would look forward to changes in my work roles brought about by the implementation of the changes at the medical center.	.36	.87
I am quite reluctant to consider changing the way I now do my work. (R)	.77	.40
<b>Creative Self-efficacy</b>		
I feel that I am good at generating novel ideas.	.88	.23
I have confidence in my ability to solve problems creatively.	.78	.39
I have a knack for further developing the ideas of others.	.70	.51

Note. The lambdas ( $\lambda$ ) and theta-deltas ( $\theta$ ) are from the completely standardized solution; Chi-square with 1874 degrees of freedom = 4024.60 ( $p < .01$ ); RMSEA = .06; NFI = .94; NNFI = .96; CFI = .97.



**Table 5-3**  
Assessment of Measurement Model (*N* = 210)

Items	$\lambda$	$\theta$
<b>Task Performance</b>		
Performs his/her job well.	.92	.15
Adequately completes assigned duties.	.94	.12
Fulfills responsibilities specified in job description.	.94	.12
Performs tasks that are expected of him/her.	.94	.11
Meets formal performance requirements of the job.	.91	.16
<b>Task-focused OCBI</b>		
Takes on extra responsibilities in order to help coworkers when things get demanding at work.	.92	.16
Helps coworkers with difficult assignments, even when assistance is not directly requested.	.93	.14
Assists coworkers with heavy work loads even though it is not part of job.	.94	.12
Helps coworkers who are running behind in their work activities.	.95	.10
Helps coworkers with work when they have been absent.	.86	.27
<b>Person-focused OCBI</b>		
Listens to coworkers when they have to get something off their chest.	.95	.09
Takes time to listen to coworkers' problems and worries.	.96	.08
Takes a personal interest in coworkers.	.87	.25
Shows concern and courtesy toward coworkers, even under the most trying business situations.	.70	.51
Makes an extra effort to understand the problems faced by coworkers.	.77	.41

**Table 5-3 (continued)**  
Assessment of Measurement Model ( $N = 210$ )

Items	$\lambda$	$\theta$
<b>Supervisor-rated Upward Organizational Communication</b>		
This employee frequently initiates communication with me.	.56	.68
This employee exchanges job relevant information with me.	.55	.70
This employee minimizes the information given to me. (R)	.90	.19
This employee deliberately withholds some information when communicating with me. (R)	.92	.15
<b>Supervisor-rated Lateral Organizational Communication</b>		
This coworker frequently initiates communication with me.	.37	.86
This coworker exchanges job relevant information with me.	.41	.83
This coworker minimizes the information given to me. (R)	.87	.25
This coworker deliberately withholds some information when communicating with me. (R)	.87	.25

Note. The lambdas ( $\lambda$ ) and theta-deltas ( $\theta$ ) are from the completely standardized solution; Chi-square with 220 degrees of freedom = 769.04 ( $p < .01$ ); RMSEA = .12; NFI = .94; NNFI = .95; CFI = .95.

### Assessment of Nested Models

To test hypothesis 1, confirmatory factor analyses were run separately on the six-factor trust foci and bases model (Model I), the three-factor model centered on trust foci (Model II), and the two-factor model centered on trust bases (Model III). The summary model fit indices are reported in Table 5-4.

Among the three nested models, Model I with the six-factor solution model had the lowest chi-square ( $\chi^2$ ) value in relation to its degree of freedom. Chi-square difference tests indicated that the six-factor solution model was superior to the three-factor solution model ( $\Delta\chi^2 = 1386.51$ ,  $\Delta df = 12$ ,  $p < .01$ ) and to the two-factor solution model ( $\Delta\chi^2 = 8102.21$ ,  $\Delta df = 14$ ,  $p < .01$ ). As mentioned earlier, RMSEA with the value below .08 indicated a good fitting model. Model I was the only model that met this criterion with a value of .07. The six-factor solution model also resulted in a better value of goodness-of-fit index (GFI; .79) than that of the three-factor solution model (.58) and that of the two-factor solution model (.21). The six-factor solution model also had the smallest value of the expected cross-validation index (ECVI) estimate among the three nested models, suggesting the greatest likelihood of generalization. Consistently, the lowest value of the Akaike information criterion (AIC) in the six-factor solution model among the three nested models indicated better fit of data and greater parsimony.

The normed fit index (NFI), the non-normed fit index (NNFI), and the comparative fit index (CFI) are incremental measures, comparing the model under evaluation to a baseline single-factor model with no measurement error. The true test regarding this set of indices comes with the comparison of the proposed model against alternative models (Hair et al., 1998). Overall, the values of these estimates in the six-factor solution model (NFI = .96, NNFI = .97, CFI = .98) were larger than those of the three-factor solution model (NFI = .93, NNFI = .94, CFI

**Table 5-4**  
Fit Indices of Three Trust Measurement Models

Measurement Models	$\chi^2$	df	RMSEA	GFI	ECVI	AIC	NFI	NNFI	CFI
Model I–6 Factor	1536.25**	579	.07	.79	5.38	1822.83	.96	.97	.98
Model II–3 Factor	2922.76**	591	.14	.58	13.58	4603.81	.93	.94	.94
Model III–2 Factor	9638.46**	593	.34	.21	69.65	23611.27	.76	.76	.77

Note. \*\*  $p < .01$ .

= .94) and those of the two-factor solution model (NFI = .76, NNFI = .76, CFI = .77). In short, the model differentiating trust by three foci and two bases emerged as the best fitting model.

#### Assessment of Reliability and Discriminant Validity

The six trust variables' reliability and variance extracted are calculated based on formulas (1) and (2) given earlier. LISREL does not provide latent construct reliability, but it can be computed given the information available in the output. The reliabilities of cognitive trust in management, affective trust in management, cognitive trust in supervisor, affective trust in supervisor, cognitive trust in coworkers, and affective trust in coworkers scores were .96, .96, .95, .96, .95, and .95, respectively. All the composite reliabilities met the cutoff value of .70. The variance extracted reflects the overall amount of variance in the indicators accounted for by the latent variable, with higher values indicating better representativeness for the latent variable. The variances extracted for cognitive trust in management, affective trust in management, cognitive trust in supervisor, affective trust in supervisor, cognitive trust in coworkers, and affective trust in coworkers were as follows: .78, .79, .77, .79, .76, and .76; all exceeded the .50 cutoff value.

Within the factor intercorrelation (phi) matrix, the high correlations between the two bases of trust in management (beta = .85), in supervisor (beta = .88), and in coworkers (beta = .82) raised the concern of discriminant validity among the six combinations of employee trust. Hence, discriminant validity tests were performed by comparing the average variance in a latent construct's indicators with the square of the construct's correlations with other latent constructs (cf. Fornell & Larcker, 1981). The results were that the squared correlation between cognitive and affective trust in management (= .72) was smaller than the average variance of these two constructs' indicators (= .79), the squared correlation between cognitive and affective trust in supervisor (= .77) was smaller than the average variance of these two constructs' indicators (=

.78), and the squared correlation between cognitive and affective trust in coworkers (= .67) was smaller than the average variance of these two constructs' indicators (= .76). Thus, these results suggest sufficient differentiation among the six trust combinations. To conclude, hypothesis 1 contending that trust bases and foci are distinguishable was supported.

#### Assessment of Common Method Variance

As noted in the methods Chapter 4, some hypotheses involved testing the relationships of predictors and criterion variables with data collected from the same source. Thus, it was necessary to examine the potential confounding effect of common method variance. Common method variance was assessed by marker variable correlational analysis. Creative self-efficacy served as the marker variable. From the correlation matrix displayed in Table 5-1, the correlation coefficients of creative self-efficacy with other substantive variables were low, suggesting it was theoretically irrelevant to substantive study variables. As per Lindell and Whitney (2001), I chose the smallest positive correlation coefficient involving creative self-efficacy with affective trust in management ( $r_s = .03$ ), and used it in the partial correlation adjustment procedure.

If the original zero-order correlation was not statistically significant, it would not be statistically significant after the adjustment for common method variance (Lindell & Whitney, 2001). Openness to organizational change did not correlate significantly with trust predictors, except for affective trust in coworkers ( $r = .16, p < .05$ ). For this reason, openness to organizational change was not included in the partial correlation adjustment procedure. For the same reason, this procedure was not conducted on the correlations for continuance organizational commitment because of its nonsignificant zero-order correlations with both cognitive and affective trust in management.

As a result, partial correlation adjustments were made on the intercorrelations of trust in management with affective organizational commitment, trust in supervisor with conflict, and trust predictors with job satisfaction. Prior to the partial correlation analysis, the conflict items were reverse scored such that the direction of the correlations between conflict (task- vs. relationship- related) and other variables would be positive. The original correlations, the corrected correlations after removing common method variance, and the disattenuated partial correlations after adjusting for scale reliability are reported in Table 5-5.

Table 5-5 showed that the corrected correlation coefficients were still statistically significant after common method variance was controlled. Table 5-5 also showed that the disattenuated partial correlations were slightly higher than the corresponding first-order partial correlations, a finding consistent with what have been observed by Lindell and Whitney (2001) and Richardson et al. (2003). Although the corrected correlation coefficients were reduced from the original ones, the differences, ranging from .02 to .03, were not substantive. These low differences suggested that the presence of common method variance in this study was minimal, leading to the confidence that the conclusions drawn from this data were not seriously affected by potential common method variance.

#### Assessment of Partial Correlations

Hypotheses H2 to H5 were tested by examining the significance of certain partial correlations and by comparing the strength of these correlations. For these hypotheses, a partial correlation is the expected correlation between two variables with the control variables (i.e., age, gender, race, education, organizational tenure, unit tenure, and supervisory tenure) held constant. The partial correlations and tests differences in the strength of these correlations for trust with

**Table 5-5**  
Assessment of Common Method Variance

	Original <i>r</i>	Corrected <i>r</i>	Disattenuated <i>r</i>
Cognitive trust in management – affective organizational commitment	.41**	.39**	.42**
Affective trust in management – affective organizational commitment	.46**	.43**	.48**
Cognitive trust in management – continuance organizational commitment	.076	n/a	n/a
Affective trust in management – continuance organizational commitment	.044	n/a	n/a
Cognitive trust in supervisor – task conflict with supervisor	.50**	.48**	.53**
Affective trust in supervisor – task conflict with supervisor	.48**	.45**	.50**
Cognitive trust in supervisor – relationship conflict with supervisor	.64**	.62**	.69**
Affective trust in supervisor – relationship conflict with supervisor	.67**	.65**	.72**
Cognitive trust in management – overall job satisfaction	.44**	.42**	.46**
Affective trust in management – overall job satisfaction	.44**	.42**	.47**
Cognitive trust in supervisor – overall job satisfaction	.43**	.41**	.46**
Affective trust in supervisor – overall job satisfaction	.43**	.40**	.45**
Cognitive trust in coworkers – overall job satisfaction	.31**	.28**	.31**
Affective trust in coworkers – overall job satisfaction	.33**	.30**	.34**

Note. Pairwise sample size ranged from 350 to 351. *r* denotes the zero-order correlation coefficient. \*\*  $p < .01$ .



commitment (H2), supervisor-subordinate conflict (H3), citizenship behavior toward coworkers (H4), and communication (H5) are presented in Table 5-6.

Organizational Commitment. The first group of correlations involved trust in management and organizational commitment (H2a—H2d). I hypothesized that trust in management would be associated with organizational commitment, with the magnitude of association being stronger when the content of trust in management (cognitive and affective) was congruent with that of organizational commitment (continuance and affective). The analysis results showed that continuance organizational commitment was not significantly correlated with cognitive ( $r = .06, p > .10$ ) or affective ( $r = .03, p > .10$ ) trust in management. Hypothesis 2b and 2d were thus not supported. Affective organizational commitment, however, was found to be significantly correlated with affective trust in management ( $r = .48, p < .01$ ) and unexpectedly with cognitive trust in management ( $r = .44, p < .01$ ). A *t*-test using the computation method outlined by Guilford and Fruchter (1973) revealed that the difference in the strength of these two partial correlations was not significant ( $t_d = 1.26, p > .05$ ). To summarize, hypothesis 2a predicting significant association of affective trust in management with affective organizational commitment was supported. Hypothesis 2c, however, which held that affective trust in management would be more closely associated with affective organizational commitment than cognitive trust in management would be was not supported.

Supervisor-subordinate Conflict. The second group of partial correlations involved trust in supervisor and conflict with supervisor (H3a—H3d). I hypothesized that trust in supervisor would lead to decreased supervisor-subordinate conflict, with the magnitude of the decrease being greater when the content of trust in supervisor (cognitive vs. affective) is congruent with that of conflict (task- vs. relationship-related). As displayed in Table 5-6, significant association

**Table 5-6**  
**Partial Correlations between Trust and Other Variables**

	Cognitive trust in management	Affective trust in management	$t_d$
Continuance organizational commitment	.06	.03	n/a
Affective organizational commitment	.44**	.48**	1.26
	Cognitive trust in supervisor	Affective trust in supervisor	$t_d$
Task conflict with supervisor	.50**	.48**	.63
Relationship conflict with supervisor	.64**	.67**	1.31
$t_d$	3.32**	4.66**	
	Cognitive trust in coworkers	Affective trust in coworkers	$t_d$
Task-focused ICB	.05	.15	n/a
Person-focused ICB	.06	.05	n/a
	Trust in supervisor	Trust in coworkers	$t_d$
Upward communication	.24**	.07	n/a
Lateral communication	.23**	.06	n/a
$t_d$	.22		

Note. Pairwise sample size ranged from 171 to 292. Conflict variables were reverse scored. Partial correlation coefficients and values of  $t$ -test comparing the strength of partial correlations are reported. \*\*  $p < .01$ .

was observed between cognitive trust in supervisor and task supervisory conflict ( $r = .50, p < .01$ ), and between affective trust in supervisor and relationship supervisory conflict ( $r = .67, p < .01$ ). Support thus was found for hypothesis 3a and 3b. The difference  $t$ -test, however, indicated that task supervisory conflict did not correlate more strongly with cognitive trust than with affective trust ( $t_d = .63, p > .05$ ), failing to support hypothesis 3c. The difference  $t$ -test also indicated that relationship conflict did not correlate more strongly with affective trust than with cognitive trust ( $t_d = 1.31, p > .05$ ), failing to support hypothesis 3d. Interestingly, in comparison to the correlations of task conflict, the correlation of relationship conflict was statistically greater with both cognitive trust ( $t_d = 3.32, p < .01$ ) and affective trust ( $t_d = 4.66, p < .01$ ). This finding suggested that increases in both bases of trust in supervisor would reduce task supervisory conflict and, with greater magnitude, would reduce relationship supervisory conflict.

ICB toward Coworkers. The third group of partial correlations involved trust in coworkers and interpersonal citizenship behavior (ICB) (H4a—H4d). The hypotheses of relevance claimed that trust in coworkers would lead to increased ICB, with the magnitude of the increase being greater when the content of trust in coworkers (cognitive and affective) is congruent with that of ICB (task- and person-focused). According to the partial correlation results, none of the four partial correlation coefficients was significant. Thus, no evidence was found to support hypothesis 4 (a, b, c, d).

Communication Flow. The final group of partial correlations involved trust in supervisor, trust in coworkers and communication flow (H5a—H5d). I hypothesized that interpersonal trust in a referent should lead to more frequent communication with that particular referent. The results indicated that trust in coworkers was not significantly related to upward communication ( $r = .07, p > .05$ ) and lateral communication ( $r = .06, p > .05$ ). Hence, no support was found for

hypothesis 5c and 5d. Trust in supervisor, however, was significantly related to upward communication ( $r = .24, p < .01$ ), which provided support for hypothesis 5a and 5b. Trust in supervisor was also found to be significantly related to lateral communication ( $r = .23, p < .01$ ). However, no significant difference was detected in the strength of correlations that trust in supervisor had with the two types of communication ( $t_d = .22, p > .05$ ).

#### Regression Results Related to H2—H5

The partial correlation and associated  $t$ -test were used in testing the hypotheses regarding the relationships of individual trust with organizational commitment (H2), supervisory conflict (H3), ICB toward coworkers (H4), and communication flow (H5). In these analyses, neither joint effects nor the intercorrelation between the predictors was taken into consideration. Because of the relevance for hypothesized relationships, I employed post hoc multiple hierarchical regressions to further explore the relative effects of trust on these outcomes. In these regression models, the effects of demographic and tenure variables were controlled first before those of substantive independent variables were examined. The results are presented in Table 5-7 through Table 5-10.

Organizational Commitment. Among the control variables, education was related to commitment such that higher education level increased affective commitment ( $\beta = .15, p < .01$ ) but decreased cognitive commitment ( $\beta = -.33, p < .001$ ). When affective commitment was the dependent variable, as displayed in Table 5-7, the addition of cognitive trust in management in Step 2 resulted in significant  $R$ -square change ( $\Delta R^2 = .20, F = 65.79, p < .001$ ). Nevertheless, its significance disappeared after affective trust in management was entered in the regression equation. The addition of affective trust in management significantly improve the model ( $\Delta R^2 = .05, F = 17.32, p < .001$ ). On the final step, the beta weight for affective trust in management was

significant ( $\beta = .39, p < .001$ ), but for cognitive trust in management was not significant ( $\beta = .14, p > 1.0$ ). Given the substantial difference in these two beta weights, it appeared that when both bases of trust in management were considered simultaneously in predicting affective commitment, the explanatory power of affective trust was greater than that of cognitive trust. The regression results displayed in Table 5-7 also indicated that neither base of trust in management had significant impact on continuance organizational commitment.

Supervisor-subordinate Conflict. Table 5-8 reports the regression results with either task- or relationship-related supervisory conflict as the dependent variable. Among the control variables, gender was significantly related to task conflict. In comparison to male subordinates, female subordinates were less likely to have task-related conflict with supervisors ( $\beta = -.14, p < .05$ ). Affective trust in supervisor was found to have a significant effect on task conflict ( $\Delta R^2 = .23, F = 80.83, p < .001$ ). The inclusion of cognitive trust in supervisor in Step 3 also added a significant amount of variance in task conflict ( $\Delta R^2 = .02, F = 8.75, p < .01$ ). In the final model, both beta weights were significant for affective trust in supervisor ( $\beta = -.22, p < .05$ ) and for cognitive trust in supervisor ( $\beta = -.31, p < .01$ ). Cognitive trust seemed to reduce task conflict to a larger degree than affective trust. The difference in the strength of these two weights, however, was minimal.

When relationship conflict was regressed onto cognitive trust in supervisor, the model improved significantly ( $\Delta R^2 = .41, F = 190.59, p < .001$ ). Entering affective trust in supervisor in the equation resulted in a significant additional amount of variance in relationship conflict ( $\Delta R^2 = .05, F = 26.19, p < .001$ ). In the final model, the beta weight for affective trust in supervisor ( $\beta = -.45, p < .001$ ) was greater than that for cognitive trust in supervisor ( $\beta = -.26, p < .01$ ).

**Table 5-7**  
Hierarchical Regression of Organizational Commitment on Trust in Management

	Dependent variables					
	Affective organizational commitment			Continuance organizational commitment		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Control variables				Control variables		
Age	.10	.07	.08	Age	.03	.03
Gender	-.07	-.02	-.02	Gender	.01	.01
Race	-.03	-.08	-.08	Race	.05	.05
Education	.08	.14*	.15**	Education	-.32***	-.33***
Organizational tenure	-.02	-.02	.01	Organizational tenure	.15	.15
Unit tenure	.01	.02	-.004	Unit tenure	-.02	-.02
Supervisory tenure	.10	.11	.11	Supervisory tenure	.11	.11
Independent variables				Independent variables		
Cognitive trust in management		.45***	.14	Affective trust in management	-.05	-.02
Affective trust in management			.39***	Cognitive trust in management		-.04
<i>F</i> statistic	1.40	9.75***	11.14***	<i>F</i> statistic	7.19***	6.38***
<i>R</i> <sup>2</sup>	.04	.23	.28	<i>R</i> <sup>2</sup>	.16	.17
Adjusted <i>R</i> <sup>2</sup>	.01	.21	.26	Adjusted <i>R</i> <sup>2</sup>	.14	.14
$\Delta R^2$	.04	.20***	.05***	$\Delta R^2$	.16***	.003

Note. Standardized regression coefficients are reported. *N* = 353.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

**Table 5-8**  
Hierarchical Regression of Supervisory Conflict on Trust in Supervisor

	Dependent variables					
	Task supervisory conflict			Relationship supervisory conflict		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Control variables				Control variables		
Age	-.05	-.02	.01	Age	-.11	-.06
Gender	-.12	-.14**	-.14*	Gender	-.02	-.05
Race	.01	.07	.05	Race	.09	.04
Education	-.10	-.11	-.09	Education	-.001	.03
Organizational tenure	.05	.07	.07	Organizational tenure	.05	.06
Unit tenure	.05	.01	.01	Unit tenure	.07	.07
Supervisory tenure	.01	.05	.04	Supervisory tenure	.03	.02
Independent variables				Independent variables		
Affective trust in supervisor		-.49***	-.22*	Cognitive trust in supervisor		-.65***
Cognitive trust in supervisor			-.31**	Affective trust in supervisor		-.45***
<i>F</i> statistic	1.15	11.41***	11.42***	<i>F</i> statistic	.99	25.31***
<i>R</i> <sup>2</sup>	.03	.26	.28	<i>R</i> <sup>2</sup>	.03	.44
Adjusted <i>R</i> <sup>2</sup>	.004	.24	.26	Adjusted <i>R</i> <sup>2</sup>	.000	.42
$\Delta R^2$	.03	.23***	.02**	$\Delta R^2$	.03	.41***

Note. Standardized regression coefficients are reported. *N* = 353.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

ICB toward Coworkers. Table 5-9 presents the regression results when ICB was the dependent variable. Among the control variables, education was significantly associated with both task-focused ICB ( $\beta = .17, p < .05$ ) and person-focused ICB ( $\beta = .29, p < .01$ ). Individuals with higher education were more likely to perform ICB than those with lower education. As shown in Table 5-9, neither cognitive nor affective trust in coworkers explained significant incremental variance in task-focused ICB. In the final model, the beta weight for affective trust in coworkers was significant ( $\beta = .25, p < .05$ ), but the beta weight for cognitive trust in coworkers was not ( $\beta = -.06, p > 1.0$ ). With regard to person-focused ICB, no significant impact for cognitive trust or affective trust in coworkers was detected. The regression results associated with ICB were consistent with those found in the partial correlations. It is worth noting, however, that in the correlation matrix, cognitive trust in supervisor was significantly associated with task-focused ICB ( $r = .29, p < .01$ ) and with person-focused ICB ( $r = .33, p < .01$ ). Similarly, affective trust in supervisor was also significantly associated with task-focused ICB ( $r = .29, p < .01$ ) and with person-focused ICB ( $r = .30, p < .01$ ).

Communication Flow. Table 5-10 presents the regression results when communication flow (upward or lateral) was the dependent variable. Race emerged as a significant factor influencing one's communication flow with supervisors and coworkers. With comparison to Caucasians, African-Americans tended to be less likely to initiate communication and exchange information with supervisors ( $\beta = -.23, p < .01$ ) and with coworkers ( $\beta = -.22, p < .01$ ). As shown in Table 5-10, trust in supervisor was associated with increased upward communication with a beta weight of .34 ( $p < .001$ ). It accounted for an incremental amount of 10 percent in the variance in upward communication ( $F = 18.88, p < .001$ ). Trust in supervisor also accounted for a significant amount of 5 percent in the variance in lateral communication ( $F = 9.71, p < .001$ ),



**Table 5-9**  
**Hierarchical Regression of ICB on Trust in Coworkers**

	Dependent variables						
	Task-focused ICB				Person-focused ICB		
	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Control variables				Control variables			
Age	-.14	-.14	-.13	Age	-.08	-.09	-.09
Gender	.02	.03	.02	Gender	.07	.07	.07
Race	-.08	-.08	-.07	Race	-.06	-.06	-.06
Education	.17*	.16*	.17*	Education	.29***	.29**	.29**
Organizational tenure	.14	.17	.17	Organizational tenure	.07	.08	.07
Unit tenure	-.03	-.03	-.04	Unit tenure	.13	.13	.14
Supervisory tenure	-.04	-.07	-.08	Supervisory tenure	-.02	-.03	-.02
Independent variables				Independent variables			
Affective trust in coworkers		.15	.25*	Cognitive trust in coworkers		.03	.09
Cognitive trust in coworkers			-.13	Affective trust in coworkers			-.08
<i>F</i> statistic	1.67	1.93	1.84	<i>F</i> statistic	3.16**	2.77**	2.49*
<i>R</i> <sup>2</sup>	.07	.09	.10	<i>R</i> <sup>2</sup>	.13	.13	.13
Adjusted <i>R</i> <sup>2</sup>	.03	.05	.05	Adjusted <i>R</i> <sup>2</sup>	.09	.08	.08
$\Delta R^2$	.07	.02	.01	$\Delta R^2$	.13**	.001	.002

Note. Standardized regression coefficients are reported. *N* = 210.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

with a beta weight of .23 ( $p < .01$ ). To the contrary, trust in coworkers was found to exert little impact on either upward communication or lateral communication. It appeared that the key for increasing workplace communication resides in employees' trust in their supervisors.

Because one's supervisor was identified as the trust referent that played a pivotal role in employee communication, I examined which source of supervisory trust—cognition or affect—contributed most to this effect. As such, hierarchical regressions were performed with both bases of supervisory trust as the independent variables. The results are presented in Table 5-11. Of the two bases of trust in supervisor, affective trust emerged as the variable leading to more upward communication ( $\beta = .43, p < .01$ ) or lateral communication ( $\beta = .29, p < .05$ ). The inclusion of affective supervisory trust accounted for an additional significant amount of the variance in upward communication ( $\Delta R^2 = .04, F = 8.58, p < .01$ ) and of the variance in lateral communication ( $\Delta R^2 = .02, F = 3.59, p < .05$ ). Hence, this study indicated that affective supervisory trust was more influential than cognitive trust in predicting employee communication, both upward and lateral.

#### Testing Hypotheses 6—8

Hierarchical multiple regressions were run to examine whether each trust referent (management, supervisor, and coworkers) and each trust base (cognitive and affective) made unique contributions in accounting for the variance in the global outcome variables (i.e., job satisfaction, task performance, and openness to organizational change). Regression results are discussed first when the independent trust variables were specified by trust foci. In this case, each trust foci predictor was produced by averaging across the two trust bases. Control variables including demographic and tenure information were entered in the first step, with the trust predictors (i.e., trust in management, trust in supervisor, and trust in coworkers) being entered in

**Table 5-10**  
Hierarchical Regression of Communication on Trust in Supervisor and in Coworkers

	Dependent variables						
	Upward communication			Lateral communication			
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	
Control variables				Control variables			
Age	-.07	-.07	-.10	Age	-.10	-.12	-.12
Gender	.04	.05	.05	Gender	.02	.03	.03
Race	-.29***	-.29**	-.23**	Race	-.27**	-.22**	-.22**
Education	.12	.12	.11	Education	.18*	.16*	.17*
Organizational tenure	.02	.02	.000	Organizational tenure	.04	.04	.03
Unit tenure	-.10	-.10	-.06	Unit tenure	-.12	-.09	-.09
Supervisory tenure	.16	.15	.15	Supervisory tenure	.16	.15	.15
Independent variables				Independent variables			
Trust in coworkers		.02	-.08	Trust in supervisor		.23**	.25**
Trust in supervisor			.34***	Trust in coworkers			-.05
<i>F</i> statistic	3.45**	3.01**	5.09***	<i>F</i> statistic	3.99***	4.91***	4.39***
<i>R</i> <sup>2</sup>	.14	.14	.24	<i>R</i> <sup>2</sup>	.16	.21	.21
Adjusted <i>R</i> <sup>2</sup>	.10	.10	.19	Adjusted <i>R</i> <sup>2</sup>	.12	.17	.16
$\Delta R^2$	.14**	.000	.10***	$\Delta R^2$	.16***	.05**	.002

Note. Standardized regression coefficients are reported. *N* = 210.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

**Table 5-11**  
Hierarchical Regression of Communication on Supervisory Trust Bases

	Dependent variables						
	Upward communication				Lateral communication		
	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Control variables				Control variables			
Age	-.07	-.10	-.11	Age	-.10	-.12	-.12
Gender	.04	.05	.07	Gender	.02	.03	.04
Race	-.29***	-.25**	-.22**	Race	-.27**	-.24**	-.22**
Education	.12	.11	.11	Education	.17	.17	.16
Organizational tenure	.02	.01	.03	Organizational tenure	.04	.03	.05
Unit tenure	-.10	-.05	-.08	Unit tenure	-.12	-.09	-.11
Supervisory tenure	.16	.14	.13	Supervisory tenure	.16	.15	.15
Independent variables				Independent variables			
Cognitive trust in supervisor		.26**	-.11	Cognitive trust in supervisor		.20**	-.04
Affective trust in supervisor			.43**	Affective trust in supervisor			.29*
<i>F</i> statistic	3.45**	4.80***	5.44***	<i>F</i> statistic	3.99***	4.54***	4.50***
<i>R</i> <sup>2</sup>	.14	.20	.25	<i>R</i> <sup>2</sup>	.16	.20	.21
Adjusted <i>R</i> <sup>2</sup>	.10	.16	.20	Adjusted <i>R</i> <sup>2</sup>	.12	.15	.17
$\Delta R^2$	.14**	.07**	.04**	$\Delta R^2$	.16***	.04**	.02*

Note. Standardized regression coefficients are reported. *N* = 210.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

the subsequent steps, respectively. Beta weights,  $R$ -squares, adjusted  $R$ -squares, incremental  $R$ -squares, and  $F$  statistics associated with each step are reported.

Job Satisfaction (H6a). As shown in Table 5-12, when job satisfaction was regressed onto the control variables in Step 1, only age appeared to have a significant impact on overall job satisfaction ( $\beta = .17, p < .01$ ). One's job satisfaction level was positively related with age. For job satisfaction, the control variables explained a significant amount of the variance ( $R^2 = .04, F = 2.12, p < .05$ ). In Step 2, the addition of trust predictors in the regression equation resulted in significant  $R$ -square change ( $\Delta R^2 = .31, F = 41.85, p < .001$ ). The beta weights were significant for trust in management ( $\beta = .31, p < .001$ ), trust in supervisor ( $\beta = .25, p < .001$ ), and trust in coworkers ( $\beta = .22, p < .001$ ). A total of 34 percent of the variance in job satisfaction was explained by this model ( $F = 14.73, p < .001$ ). Thus, across both bases combined, trust in each referent was found to be positively and significantly related to job satisfaction, lending support to H6a. It was noteworthy that the strength of coefficients of trust in coworkers, trust in supervisor, and trust in management increased in order.

Task Performance (H7a). As shown in Table 5-12, after task performance was regressed onto control variables, age was negatively related to task performance rated by the immediate supervisor ( $\beta = -.18, p < .05$ ), and education was positively related to task performance ( $\beta = .30, p < .001$ ). Thus, employees who were younger or had higher education tended to receive higher performance ratings than those who were older or had lower education. The demographic and tenure differences accounted for a significant amount of variance ( $R = .15, F = 3.68, p < .01$ ). The inclusion of three trust predictors specified by foci failed to produce meaningful increase in explained variance ( $\Delta R^2 = .03, F = 1.83, p > .10$ ). The significant beta weight of trust in supervisor ( $\beta = .18, p < .05$ ) and significant overall  $F$  statistic, however, confirmed that task

**Table 5-12**  
Hierarchical Regression of Job Satisfaction and Task Performance on Trust Foci

	Dependent variables				
	Job satisfaction			Task performance	
	Step 1	Step 2		Step 1	Step 2
Control variables			Control variables		
Age	.17**	.12*	Age	-.18*	-.19*
Gender	-.08	-.02	Gender	.18*	.18*
Race	.03	.05	Race	.08	.11
Education	-.09	.07	Education	.30***	.30***
Organizational tenure	-.12	-.08	Organizational tenure	.15	.13
Unit tenure	-.02	.01	Unit tenure	-.07	-.05
Supervisory tenure	.07	.04	Supervisory tenure	.02	.02
Independent variables			Independent variables		
Trust in management		.31***	Trust in management		-.02
Trust in supervisor		.25***	Trust in supervisor		.18*
Trust in coworkers		.22***	Trust in coworkers		-.08
<i>F</i> statistic	2.12*	14.73***	<i>F</i> statistic	3.68**	3.17**
<i>R</i> <sup>2</sup>	.05	.36	<i>R</i> <sup>2</sup>	.15	.18
Adjusted <i>R</i> <sup>2</sup>	.03	.34	Adjusted <i>R</i> <sup>2</sup>	.11	.12
$\Delta R^2$	.05*	.31***	$\Delta R^2$	.15**	.03

Note. Standardized regression coefficients are reported. Listwise sample size ranged from 210 to 353.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

performance was significantly affected by combined cognitive and affective trust in the supervisor. In this final regression model, the *R*-square was not significant but one of the independent variable was (trust in supervisor). This type of results can occur when other independent variables included in the model have trivial effects on the criterion variable, thereby lowering the overall *R*-square (cf. Cohen, Cohen, West, & Aiken, 2003). The final model accounted for a total of 12 percent of the variance in task performance ( $F = 3.17, p < .01$ ). The regression results revealed that of the three foci, only trust of supervisor was positively and significantly associated with task performance. Hence, H7a was not supported.

Hierarchical regression was also performed to examine the predictive validity of trust bases. Cognitive trust was the sum of cognitive trust across the three referents. Affective trust was computed in the same manner. Job satisfaction and task performance were regressed onto these two types of trust, after the control variables were first entered.

Job Satisfaction (H6b—H6c). Hypothesis 6b argued that cognitive trust across all three referents would account for unique variance in job satisfaction above and beyond that explained by affective trust. To test this hypothesis, job satisfaction was regressed onto affective trust and cognitive trust sequentially. As reported in Table 5-13, in Step 3 of the hierarchical regression, the inclusion of cognitive trust explained an additional 1 percent of the variance ( $F = 3.95, p < .05$ ). The beta weight for cognitive trust in the final model was significant ( $\beta = .19, p < .05$ ). H6b thus was thus supported.

Hypothesis 6c suggested that affective trust across all three referents would account for unique variance in job satisfaction above and beyond that explained by cognitive trust. To test this hypothesis, job satisfaction was regressed onto cognitive trust and affective trust sequentially. In Step 3, the inclusion of affective trust explained an additional 4 percent of the

**Table 5-13**  
Hierarchical Regression of Job Satisfaction on Trust Bases

	Dependent variable				Job satisfaction		
	Job satisfaction				Job satisfaction		
	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Control variables				Control variables			
Age	.18**	.14*	.12*	Age	.18**	.11	.12*
Gender	-.07	-.02	-.02	Gender	-.07	-.03	-.02
Race	.04	.07	.06	Race	.04	.04	.06
Education	-.10	.07	.07	Education	-.10	-.09	-.07
Organizational tenure	-.12	-.08	-.08	Organizational tenure	-.12	-.09	-.08
Unit tenure	-.01	-.01	.003	Unit tenure	-.01	.02	.003
Supervisory tenure	.07	.03	.03	Supervisory tenure	.07	.05	.03
Independent variables				Independent variables			
Affective trust		.56***	.40***	Cognitive trust		.53***	.19*
Cognitive trust			.19*	Affective trust			.40***
<i>F</i> statistic	2.21*	18.29***	16.88***	<i>F</i> statistic	2.21*	15.70***	16.88***
<i>R</i> <sup>2</sup>	.06	.36	.37	<i>R</i> <sup>2</sup>	.06	.33	.37
Adjusted <i>R</i> <sup>2</sup>	.03	.34	.35	Adjusted <i>R</i> <sup>2</sup>	.03	.31	.35
$\Delta R^2$	.06*	.31***	.01*	$\Delta R^2$	.06*	.27***	.04***

Note. Standardized regression coefficients are reported. *N* = 353.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.



variance ( $F = 18.08, p < .001$ ). The beta weight was significant for cognitive trust ( $\beta = .40, p < .001$ ). H6c was also supported. The final model accounted for a total of 35 percent of the variance in job satisfaction ( $F = 16.88, p < .001$ ). In short, both trust bases were found to make unique contributions in predicting job satisfaction.

Task Performance (H7b—H7c). Hypothesis 7b posited that cognitive trust across all three referents would account for unique variance in task performance above and beyond that explained by affective trust. To test this hypothesis, affective trust and cognitive trust were entered sequentially in the equation with task performance as the dependent variable. As displayed in Table 5-14, adding cognitive trust in Step 3 after affective trust did not help improve the regression model ( $\Delta R^2 = .001, F = 0.16, p > 1.0$ ). In the final model, cognitive trust ( $\beta = -.06, p > .10$ ) had nonsignificant beta weight. Thus, H7b was not supported.

Hypothesis 7c posited that affective trust across all three referents would account for unique variance in task performance above and beyond that explained by cognitive trust. To test this hypothesis, cognitive trust and affective trust were entered sequentially in the regression equation with task performance as the dependent variable, followed by affective trust. After affective trust was entered in the equation in Step 3, the amount of incremental *R*-square change was not significant ( $\Delta R^2 = .01, F = 1.23, p > 1.0$ ). The beta weight in the final model was not significant for affective trust ( $\beta = .16, p > .10$ ). Thus, H7c was not supported.

Openness to Organizational Change (H8a—H8c). From the regression results on openness to organizational change presented in Table 5-15, race was negatively related to the dependent variable ( $\beta = -.23, p < .001$ ), indicating that in comparison with Caucasians, African-Americans were less likely to be open to organizational change. Education was positively related

**Table 5-14**  
Hierarchical Regression of Task performance on Trust Bases

	Dependent variable				Task performance		
	Task performance				Task performance		
	Step 1	Step 2	Step 3		Step 1	Step 2	Step 3
Control variables				Control variables			
Age	-.18*	-.19*	-.18*	Age	-.18*	-.19*	-.18*
Gender	.18*	.19*	.19*	Gender	.18*	.19*	.19*
Race	.08	.09	.09	Race	.08	.08	.09
Education	.30***	.30***	.30***	Education	.30***	.30***	.30***
Organizational tenure	.15	.17	.17	Organizational tenure	.15	.15	.17
Unit tenure	-.07	-.06	-.07	Unit tenure	-.07	-.06	-.07
Supervisory tenure	.02	.002	.001	Supervisory tenure	.02	.01	.001
Independent variables				Independent variables			
Affective trust		.11	.16	Cognitive trust		.08	-.06
Cognitive trust			-.06	Affective trust			.16
<i>F</i> statistic	3.68**	3.51**	3.12**	<i>F</i> statistic	3.68**	3.35**	3.12**
<i>R</i> <sup>2</sup>	.15	.16	.16	<i>R</i> <sup>2</sup>	.15	.15	.16
Adjusted <i>R</i> <sup>2</sup>	.11	.11	.11	Adjusted <i>R</i> <sup>2</sup>	.11	.11	.11
$\Delta R^2$	.15**	.01	.001	$\Delta R^2$	.15**	.01	.01

Note. Standardized regression coefficients are reported. *N* = 210.

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

to openness to organizational change ( $\beta = .15, p < .05$ ), indicating that individuals having more education tended to be more open to change than those having less education.

Overall, the amount of the variance explained by control variables was significant ( $R^2 = .09, F = 3.71, p < .001$ ) in Step 1. After the effects of control variables on the dependent variable were held constant, there was no substantial increase in the variance with the inclusion of cognitive trust in management, cognitive trust in supervisor, and affective trust in coworkers ( $\Delta R^2 = .01, F = .46, p > 1.0$ ) in Step 2. In the final model, the beta weights were not significant either for cognitive trust in management ( $\beta = .03, p > .10$ ), cognitive trust in supervisor ( $\beta = -.06, p > .10$ ), or affective trust in coworkers ( $\beta = .04, p > .10$ ). Contrary to H8a and H8b, no support was found for the positive, significant influence of cognitive trust in either management or supervisor on openness to organizational change. Similarly, contrary to H8c, no support was found for the negative, significant influence of affective trust in coworkers on openness to organizational change.

Table 5-16 provides the summary of the results of the dissertation study. In this Table, results testing the study hypotheses are presented. Each hypothesis is noted as being supported or not supported.

**Table 5-15****Hierarchical Regression of Openness to Organizational Change**

	Dependent variable	
	Openness to organizational change	
	Step 1	Step 2
Control variables		
Age	-.002	-.003
Gender	.09	.10
Race	-.22***	-.22***
Education	.15*	.15*
Organizational tenure	-.04	-.03
Unite tenure	-.07	-.08
Supervisory tenure	-.07	-.07
Independent variables		
Cognitive trust in management		.03
Cognitive trust in supervisor		-.06
Affective trust in coworkers		.04
<i>F</i> statistic	5.15***	3.72***
$R^2$	.12	.13
Adjusted $R^2$	.10	.09
$\Delta R^2$	.12***	.01

Note. Standardized regression coefficients are reported. Listwise sample size was 353.

\*  $p < .05$ . \*\*\*  $p < .001$ .

**Table 5-16****Summary of Hypothesis Testing Results**

Hypothesis	Result
H1: Employees will distinguish among both foci and bases of trust within organizations.	Supported
H2a: Affective trust in management will be positively and significantly related to affective organizational commitment.	Supported
H2b: Cognitive trust in management will be positively and significantly related to continuance organizational commitment.	Not supported
H2c: Affective trust in management will be more closely related to affective organizational commitment than cognitive trust in management will be.	Not supported
H2d: Cognitive trust in management will be more closely related to continuance organizational commitment than affective trust in management will be.	Not supported
H3a: Cognitive trust in one's supervisor will be negatively and significantly related to task conflict with the supervisor.	Supported
H3b: Affective trust in one's supervisor will be negatively and significantly related to relationship conflict with the supervisor.	Supported
H3c: Cognitive trust in one's supervisor will be more closely related to task conflict with the supervisor than affective trust will be.	Not supported
H3d: Affective trust in one's supervisor will be more closely related to relationship conflict with the supervisor than cognitive trust will be.	Not supported
H4a: Cognitive trust in one's coworkers will be positively and significantly related to task-focused citizenship behavior directed toward coworkers.	Not supported
H4b: Affective trust in coworkers will be positively and significantly related to person-focused citizenship behavior directed toward coworkers.	Not supported
H4c: Cognitive trust in coworkers will be more closely related to task-focused citizenship behavior toward coworkers than affective trust will be.	Not supported
H4d: Affective trust in coworkers will be more closely related to person-focused citizenship behavior toward coworkers than cognitive trust will be.	Not supported
H5a: Trust in one's supervisor will be positively and significantly related to upward communication.	Supported
H5b: Trust in one's supervisor will be more strongly related to upward communication than trust in one's coworkers will be.	Supported

**Table 5-16 (continued)**

Hypothesis	Result
H5c: Trust in one's coworkers will be positively and significantly related to lateral communication.	Not supported
H5d: Trust in one's coworkers will be more strongly related to lateral communication than trust in one's supervisor will be.	Not supported
H6a: Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to job satisfaction.	Supported
H6b: Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by affective trust across all three referents.	Supported
H6c: Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in job satisfaction above and beyond that explained by cognitive trust across all three referents.	Supported
H7a: Across both bases, trust in each referent (i.e., management, supervisor, and coworkers) will be positively and significantly related to task performance.	Not supported
H7b: Cognitive trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by affective trust across all three referents.	Not supported
H7c: Affective trust across all three referents (i.e., management, supervisor, and coworkers) will account for unique variance in task performance above and beyond that explained by cognitive trust across all three referents.	Not supported
H8a: Cognitive trust in management will be positively and significantly related to openness to organizational change.	Not supported
H8b: Cognitive trust in one's supervisor will be positively and significantly related to openness to organizational change.	Not supported
H8c: Affective trust in one's coworkers will be negatively and significantly related to openness to organizational change.	Not supported

## **CHAPTER 6: DISCUSSION AND CONCLUSION**

The aim of this dissertation study was to highlight and demonstrate the importance of understanding workplace trust from a multi-foci and multi-bases perspective. Toward this end, the distinctiveness of different combinations of trust foci and bases was examined, and their relationships with other work outcomes were investigated. This chapter will summarize the findings and theoretical insights that may be drawn as well as present possible explanations for some unexpected findings. Implications of the current study for research and practice and study limitations, and avenues for future research are also discussed.

### **Research Findings**

#### **Principal Combinations of Employee Trust**

The distinctiveness between cognitive and affective bases of trust has been empirically evidenced in the context of professional peer relationships in a study conducted by McAllister (1995). To date, however, the distinctiveness of trust's two bases, especially across organizational referents commonly important to employees, has not been examined in an actual workplace setting. More research on this subject matter has been called for by Dirks and Ferrin's (2002) review of the trust literature, and their work served as the impetus for the current investigation. To conduct this investigation, a new trust instrument was developed. This instrument was designed to tap trust's two bases and varying organizational referents. The results of the current investigation provide some support for the assertion that the two-dimensional structure of trust holds across three referents in the workplace. Six principal combinations of trust foci and bases were found to be distinguishable from an employee standpoint. With multiple foci and bases of trust explicitly recognized, this study could take a more complete look at employees' trust relationships.

To further demonstrate the benefits of distinguishing foci and bases of trust, I examined the specific trust relationships with individual attitudinal, performance, and behavioral outcomes. The research findings suggest that distinguishing trust foci and bases may have implications for some important outcomes. Below, I summarize study results for attitudinal, performance, and behavioral outcomes, respectively. Insights gained from the current investigation will be discussed in more detail in the section on implications for research and practice.

### Organizational Commitment

This study supported a general linkage between trust in management and organizational commitment, a finding consistent with what has been reported in prior studies (e.g., Aryee et al., 2002). Nevertheless, results also showed that it would be oversimplifying the trust-commitment relationship were bases of trust to go undistinguished. Both bases of trust in management had little impact on continuance commitment. This finding was not entirely surprising, in that, research has suggested that continuance commitment tends to be unrelated, or negatively related, to job performance and positive behaviors such as organizational citizenship behavior and attendance (Meyer, Becker, & Vandenberghe, 2004). With this in mind, the current study suggested that trust in management, and the positive expectations this would bring, has little to do with commitment that depends on calculative costs.

Regarding affective organizational commitment, the partial correlation results reported indicate that both bases of trust in management exerted significant influence on commitment to the organization. Moreover, the multiple regression results singled out affective trust in management, rather than cognitive trust in management, as a more important predictor of affective commitment. This finding was consistent with Dirks and Ferrin's (2002) meta-analytic results, which indicated that trust in organizational leadership (i.e., supervisor and senior



leadership) had a larger relationship with organizational commitment, in comparison to other outcomes. Clearly, management's trustworthiness is directly related to employees' willingness to commit to an organization.

The above finding also supports the meaningfulness of considering affective elements of trust with management, which comprises a group of people who may not interact with individual employees on a personal level. Indeed, managing from a distance does not negate the possibility that management can cultivate emotional connections with employees. The finding that it was affective, rather than cognitive, trust which played a role in shaping commitment is worth noting in light of Dirks and Ferrin's (2002) meta-analysis results. Owing to a paucity of data operationalizing purely affective trust, they compared cognitive trust against overall trust in leadership in relation to outcome constructs. They found that organizational commitment had a significantly larger relationship with cognitive trust when compared with overall trust. Yet, my results actually suggest that when examined independently from cognitive trust, affective trust tend to be more dominant than cognitive trust in influencing organizational commitment. This study, therefore, helps clarify that it takes more than a belief in management's dependability and competency to strengthen employees' commitment to a work organization. Some sort of emotional closeness aroused by management's genuine care and consideration may also be important for gaining this end. As noted previously, management's symbolic communication can help build such emotional bonds with organizational members.

### Job Satisfaction

Job satisfaction has been a common attitudinal outcome variable linked with trust in the past (cf. Dirks & Ferrin, 2001). Its relationship with trust in organizational leadership (including supervisory and executive leadership) was the strongest in Dirks and Ferrin's (2002) meta-

analytic results. The present study took a more comprehensive approach on trust when reexamining its relationship with job satisfaction. Results suggested that each of six combinations of trust foci and bases increased job satisfaction.

Job satisfaction was the only global variable in the current study for which both cognitive trust and affective trust across all three referents explained unique variance. In light of this finding, trust in management, supervisor, or coworkers based on their dependability and competency may translate into positive evaluations about one's workplace and job. Moreover, trust in organizational constituencies due to emotional bonds may also bring about more positive feelings concerning one's job. The results of the current study underscore that job satisfaction may be the function of both rational judgments and emotional experiences at work. This understanding resonates with the recent research (Schleicher, Watt, & Greguras, 2004; Weiss et al., 2004) indicating that job satisfaction has both cognitive and affective roots.

Results also supported the uniqueness of trust foci in contributing to job satisfaction. This finding runs counter to the some researchers' views (see Chapter 2) whereby trust operates in a complementary manner such that one form of trust can substitute for another in increasing one's job satisfaction. Rather, this study suggested that the six combinations of trust foci and bases can operate in an additive manner, thereby maximizing the level of one's job satisfaction. In particular, holding trust in the constituencies higher in organizational status, including management and immediate supervisor, appeared to exert more influence on one's job satisfaction level than holding trust in coworkers. This finding was noteworthy because it reinforced the salience of a subordinate's vulnerability in a hierarchical relationship (Kramer, 1996). Subordinates tend to be more vulnerable to organizational authorities than to peers in that authorities can make more decisions that affect them. Because organizational authorities have

such power, a low level of trust in authorities might be psychologically distressing, which, in turn, may affect one's attitudes about the job generally (Dirks & Ferrin, 2002).

### Task Performance

Whereas the literature somewhat links employee trust with attitudinal consequences (e.g., organizational commitment and job satisfaction), there has been less support for trust's consequences for individual performance (Dirks & Ferrin, 2001). Trust in leadership had a relatively small, though significant, relationship with individual performance ( $r = .16$ ) in Dirks and Ferrin's (2002) meta-analytic results. This relatively weak trust-performance link is intriguing, especially in light of the recent research on the positive effects of trust in general managers on organizational performance, as indicated by sales and profits in the restaurant industry (Davis, Schoorman, Mayer, & Tan, 2000). Why have the effects of trust on individual performance been found to be relatively weak? Findings from the current investigation might help explain this phenomenon.

Multiple-regression results indicated that management was not an important referent for employee trust when individual task performance was the criterion of interest. Instead, trust in the supervisor was found to be associated with subordinate's work efforts, a reasonable result given the proximity of one's supervisor relative to senior management. In addition, proximity may take on more bearing on individual behavior than on attitudes. This notion agrees with the idea that trust in one's supervisor should be more strongly related to job level variables than to organizational level variables (Dirks & Ferrin, 2002). Coupled with the results for organizational commitment, my findings also suggest that trust directed to one referent may be more potent than trust directed to another, depending on the outcomes of interest.

The impact of trust in one's supervisor on task performance could come either from a cognitive or an affective base. The positive influence of cognitive trust in supervisor would be expected. When a subordinate's immediate supervisor is competent, fair, and reliable, he/she would be more willing to follow the supervisor's guidance and directions with little doubt and apprehension. In turn, this may help facilitate one's job performance. Moreover, affective trust in the supervisor also might play a role in achieving a desired level of job performance. As argued in the hypothesis section, positive and emotional experiences growing from affective trust relationships with others would motivate individuals at work. According to this study's results, such positive experiences have more of an impact coming from one's supervisor as opposed to from one's coworkers.

Task performance had little to do with trust in coworkers despite the high level of job interdependence in the surveyed organizations. The nonsignificant impact of coworker trust on task performance somewhat contradicts Costigan et al.'s (1998) findings that employees' affective trust (but not cognitive trust) in coworkers was significantly correlated with their motivation. In hindsight, perhaps the effects of trust among coworkers might be more pronounced when unit or department performance is involved. Perhaps, the "bottom-line" effects of trust on organizational performance are stronger than what might be expected on the basis of the data from studies of trust's relationship with individual performance (Dirks & Skarlicki, 2004). There is no guarantee, however, that trust will have a significant impact on peers even if unit performance is the focus. For example, in Dirks's (1999) study on NCAA basketball teams, a context where trust in teammates would be expected to be highly crucial for success, trust in the head coach proved to be the more important predictor of team performance.

With a broader conceptualization of trust, this study may help shed light on why the trust-performance link has been weaker than what might be expected. One reason might be due to choosing referents of trust that were not relevant to performance. Focusing on referents other than immediate supervisors could dissipate trust-performance relationships. Additionally, few studies examining the consequence of trust on individual performance have explicitly recognized the affective component when operationalizing trust. The correlation matrix in Table 5-1 shows that, among the six combinations of trust bases and foci, only affective trust in one's supervisor correlated with task performance. Considering the relational and emotional content of trust, especially with reference to one's supervisor, may be necessary for understanding links of trust with bottom line effects such as individual task performance.

#### Supervisor-subordinate Conflict

The purpose of investigating the dynamics between trust and conflict in supervisor-subordinate settings was twofold. First, task and relationship dimensions have been increasingly used in intragroup conflict studies to understand the nature and consequences of conflict phenomena (cf. De Dreu & Weingart, 2003). As knowledge concerning conflict in group contexts grows, it is important to understand the task-relationship conflict distinction in supervisor-subordinate dyads because how individuals interpret and handle conflict may differ depending on their hierarchical relationships (e.g., Lee, 2002). Second, there has been emergent interest in how trust plays out in group conflict situations. For example, trust among group members has been found to mitigate the escalation of conflict from task to the relationship variety (Simons & Peterson, 2000) and buffer groups from experiencing worse relationship conflict (Peterson & Behfar, 2003). What has been missing, however, is direct consideration

regarding the influence of trust on supervisor-subordinate conflict. The current research sought to address this particular matter.

The partial correlations and regression results uncovered a significant, negative connection between trust in one's supervisor and conflict with one's supervisor. Generally, a willingness to be vulnerable to the supervisor's decisions or actions would be expected to reduce the occurrence of conflict with the supervisor. The partial correlations and associated *t*-tests showed that both cognitive and affective trust in the supervisor would be more likely to reduce conflict involving personal relationship issues than to reduce conflict involving task issues. This finding implies that trust grounded either in supervisory characteristics or in emotional bonds is helpful in preventing the occurrence of relationship conflict which tends to be detrimental to group performance. Although the magnitudes of coefficient differences revealed in the regression analyses were not considerable, study findings indeed suggested that some dynamics between trust and conflict in supervisor-subordinate relationships might be overlooked if only one dimension of either of the two constructs had been examined. Again, this study suggested that it is beneficial to conduct finer-grained analyses for the purpose of understanding how trust relates to other constructs.

#### Citizenship Behavior toward Coworkers

In accordance with social exchange theory, I expected a positive link between trust in one's coworkers and ICB. Both partial correlations and regression analyses provided little support for this link. Instead, trust in one's supervisor was identified from the correlation matrix as more likely to be associated with ICB. The strength of correlations that both bases of trust in supervisor had with ICB was comparable to one another.

In retrospect, the relationship pattern linking ICB with trust in one's supervisor as opposed to that with trust in peers might speak of personal motives that can sometimes underlie helping behavior. Impression management literature exploring self-serving motives suggested that people may engage in citizenship behavior for a desire to maintain a positive image and avoid creating a negative one (e.g., Rioux & Penner, 2001). Accordingly, one may be motivated to maintain a positive image, especially when more personal ties, as indicated by affective trust, exist with one's supervisor. To maintain a positive image connotes that one may help coworkers with tasks or express consideration and concern in front of supervisors. On the other hand, a relationship with the supervisor void of trust may provide less incentive for one to perform extra role helping behavior. Distrust caused by abusive supervision creates a context in which subordinates are more likely to be suspicious of coworkers' intentions (Tepper, Duffy, Hoobler, & Ensley, 2004). In short, impression management might serve as an alternative motive, other than trust in coworkers, for helping behavior aimed at coworkers, thus providing possible explanations for the significant relationship between trust in supervisor and ICB directed at coworkers.

The correlation matrix in Table 5-1 also indicated that the association between cognitive or affective trust in management with helping behavior was inconsequential. Apparently, an impact of trust in the supervisor on helping behavior is more likely than owing to trust in management. This finding was consistent with Dirks and Ferrin's (2002) meta-analytical results. They reported that the relationship between trust and altruism (similar to helping behavior) was significantly higher when the referent was a direct leader as opposed to broader organizational leadership. The influence of trust in the supervisor on one's helping behavior notwithstanding, failure to find significant effects of trust in coworkers on ICB was still unexpected. In the

literature, affective trust in peers has been found to be related to task-focused ICB (McAllister, 1995) as well as person-focused ICB (McAllister, 1995; Settoon & Mossholder, 2002).

Elsewhere, cognitive trust in work group peers has been found to be related to citizenship behavior directed at peers (Chattopadhyay, 1999). One possible explanation for the current research finding is that referents for trust were examined in a more inclusive way such that the importance of trust in one's supervisor can override that of trust in one's peers. More research is needed for further understanding in this area.

### Communication Flow

Partial correlation results indicated that trust in one's supervisor was significantly related to communication flowing upward with one's supervisor and laterally with one's coworkers. Multiple regression results further indicated that affective, rather than cognitive, trust in one's supervisor played a larger role in subordinates' initiating and increasing these communication flows. This finding was consistent with the recent research on trust and communication, showing that as communication frequency increases, interpersonal contexts become more important than attitudinal predispositions as determinants of others' trustworthiness (Becerra & Gupta, 2003). One reason for this phenomenon is that expressing one's opinions or providing feedback to the supervisor puts a person in a vulnerable situation, because the supervisor can take it in a negative way. Therefore, it is reasonable to assume that it takes trust to open up communication with one's supervisor, and that close personal ties may create more opportunities for open communication.

It is also interesting that trust in one's supervisor facilitates communication with coworkers. Contrary to what was expected, trust in coworkers did not predict upward communication or lateral communication. Open lateral communication among coworkers



illustrates the presence of psychological safety in work groups. In such “safe” groups, one can seek feedback, report mistakes, or propose new ideas without feeling fear of potential negative consequences (Edmondson, 2004). If relationships within a group are characterized by lack of psychological safety, individuals are likely to feel monitored and keep their opinions to themselves for fear of harming their reputations.

It has been argued that supervisory trustworthiness can contribute to creating a safe social atmosphere at work (Hodson, 2004). It may be that individuals in groups are likely to evaluate and mimic supervisory information sharing behavior. If supervisors are taciturn and their behavior indicates that certain matters are best not discussed, group members will follow these examples (Edmondson, 2004). Conversely, group members who hear their leader admit to the group that he/she made a mistake are likely to remember this the next time they make mistakes and feel more comfortable discussing them. In a similar vein, it has been found that when there is an emphasis on openness and information sharing with the supervisor, this pattern of communication is likely to be adopted within the work group (Costa, 2003). So, one ramification of my results is that trust in one’s supervisor may be a key in building a social work climate where conflict, gossip, and infighting among coworkers are minimized. This notion parallels what has been observed in interviews conducted by Abrams and colleagues (Abrams, Cross, Lesser, & Levin, 2003)—people take interactional cues from the larger environment. As a result, there may be a ‘trickle down’ effect for trust, where the way supervisors treat employees leads to employees treating one another similarly.

A final mechanism through which trust in one’s supervisor facilitates more open communication with coworkers can be related to identification with superordinate goals. A higher level of communication entails initiating information exchange and not withholding job

relevant information. This requires individuals to transcend personal goals and focus on higher, collective goals. It has been argued that trust in the supervisor arising from the supervisor's trustworthy characteristics allows individuals working in group contexts to suspend their individual doubts and personal motives and to work toward common group goals (Dirks & Skarlicki, 2004). Further, trust in the supervisor arising from the supervisor's care and consideration may further inspire individuals to be willing to take the risk of focusing on attaining common goals and communicate in ways that bring these goals about.

## **Implications**

### **Implications for Research**

Whereas researchers have increasingly agreed that trust has a number of benefits to organizations and their members, the organizational trust literature has not consistently found empirical evidence to substantiate this idea (Dirks & Ferrin, 2001). Although it may be intuitively appealing to consider that trust is important for individuals, groups, and organizations, research to date has provided mixed evidence for viewing trust as a concept of substantial importance to organizational effectiveness (Dirks & Skarlicki, 2004). The current study was initiated in an effort to address such emerging research questions.

In their review of the trust literature, Dirks and Ferrin (2002) provided a parsimonious two-dimensional framework that views trust as grounded on a cognitive or an affective base. Given its recency, empirical work needs to be done to assess its utility. The current study adopted the two bases of trust framework, attempting to support its applicability in understanding employee relationships with management, immediate supervisors, and coworkers.

As noted previously, theory and research on the concept of trust has been dominated by the cognitive view, whereas the affective-oriented perspective has been given less attention. Due

to the few studies where operationalizations of trust were purely affective, Dirks and Ferrin (2002) were unable to directly examine the moderating effects of definitions of trust in reviewing the antecedents and outcomes of trust. Gauging the relative magnitudes of trust-outcome relationships with the two bases explicitly measured, the current study has found that affective trust may be important in several aspects of organizational life. It appeared to be more influential than cognitive trust in connection with specific attitudinal, behavioral, and performance outcomes. Affective trust was associated with affective organizational commitment, upward and lateral communication, task- and person-focused citizenship behavior toward coworkers, job satisfaction, and task performance. Suffice it to say, in the present study, the significance of trust's impact largely resides on relational or emotional concerns. Thus, more balanced efforts studying trust on both of the cognitive and affective orientations should be considered in the future.

It has been argued that in addition to identifying bases of trust, identifying the exact referent of trust is important also (Dirks & Ferrin, 2002; Dirks & Skarlicki, 2004). Explicitly recognizing referents for employee trust becomes particularly relevant in investigating the specific consequences of trust in organizations. In order to effectively leverage the benefits of workplace trust, there needs to be a better understanding of which referents may be most relevant for particular outcomes (Dirks & Skarlicki, 2004). For example, whereas trust in management was identified to be critical for fostering employees' loyalty and commitment to the organization, trust in one's supervisor was a key for individual task performance. As for job satisfaction, trust vested on all three referents—management, supervisor, and coworkers—may be required to allow employees to reach optimal levels of this construct. In brief, more thought needs to be given in choosing the referents of trust in future studies.

While addressing emerging research questions specifically related to the trust literature, the current study took advantage of some methodological advancement in the process. The potential bias associated with common method variance is a common problem in organizational behavior research (Podsakoff et al., 2003). The present study collected the survey data from two sources (i.e., employees themselves and their immediate supervisors) help combat this problem. Supervisors rated subordinates' task performance, citizenship behavior toward coworkers, and communication behaviors. Remaining measures, however, were self-reported by employees themselves. As some of the hypothesized relationships were still subject to percept-percept inflation, Lindell and Whitney's (2001) marker variable technique was used to estimate the actual percept-percept inflation. The marker variable technique has not been widely used in the organizational behavior research (Lindell & Brandt, 2000). Results of the adjusted correlations after common-method variance was controlled indicated that the results were not seriously exposed to percept-percept inflation. Thus, concerns for common-method biases were eased to some extent in this study. Thus, the current study provided an application of this relatively new technique.

### Implications for Practice

The importance of trust for practicing managers and executives can be seen in light of its effects on individual attitudes, behavior, and performance. The findings of this study illustrates that employees' trust in management may affect their commitment to the organization as well as their job satisfaction. As has been noted in the literature, human resource practices are associated with employee perceptions of management's trustworthiness. Oft-cited examples of such practices include equitable reward systems, developmental performance appraisal systems, employee involvement systems, and training and development availability. Other types of human

resource practices may include providing profit sharing, creating internal labor markets, decentralization of decision making, and sharing of financial and performance information throughout an organization (Darley, 2004; Ostroff & Bowen, 2000).

The benefits of such human-resource practices can be manifested in employee attributes such as increased trust, commitment, and job satisfaction, which, in turn, affect organizational effectiveness and performance (Ostroff & Bowen, 2000). Human-resource practices may not only influence employees' cognitive trust, but also affective trust. Indeed, care and concern for the well-being of organizational members can be perceived and interpreted from benevolent human resource practices. Human-resource practices have been argued to be able to symbolically communicate the organization's values to its members (Ferris, Hochwarter, Buckley, Harrell-Cook & Frink, 1999). So-called "high commitment practices" invite employees to develop emotional bonds with the organization (Darley, 2004).

In addition, trust-building structures (e.g., human resource systems) may go-hand-in-hand with executive leadership. Management groups usually comprise executives whose decisions and actions will have a significant impact on employees. Effective executive development programs which update executives' knowledge and conceptual skills may help bolster employees' cognitive trust (Hill, 2004). Through such development programs, executives can refine their conceptual competencies and continually hone their strategic thinking abilities in the increasingly dynamic business environment. As a result, employees would be more likely to place more cognitive trust in management.

On the other hand, improving executives' symbolic communication may be more effective in engendering affective trust among employees. With the increased need to exercise influence without relying on formal hierarchical authorities, interpersonal and communication

competencies have become especially important for management (Hill, 2004). As discussed, management's articulation of vision and use of language in delivering speeches may be important in fostering emotional bonds with organizational members. As such, development programs targeting at polishing executives' presentation skills would be useful for developing the management-member relationship. Additionally, organizations can create more opportunities to facilitate such relationship building. Symbolic actions such as ceremonies and lunch events, for example, provide integrative opportunities for management and employees.

The findings of this study also intimate the importance of supervisory trustworthiness. The extent to which employees trust their supervisors was found to be significantly associated with task performance, open communication, and helping behavior among coworkers. The impact of supervisory trustworthiness can extend beyond specific supervisor-subordinate dyads. More specifically, supervisory trustworthiness may influence the psychological climate which pervades work groups, subordinate interactions with one another, and group norms regulating members' communication styles. It has been argued that first-line supervisors can promote their trustworthiness through a range of interactions with subordinates. In this regard, Whitener et al. (1998) summarized five categories of supervisory behavior—behavioral consistency, behavioral integrity, sharing and delegation of control, communication style (e.g., accuracy, explanations, and openness), and demonstration of concern. Relatedly, the interviews conducted in twenty organizations by Abrams and his research team (2003) provided rich information regarding which supervisory actions can promote trust. Some of these supervisory actions may be more related to cognitive trust, whereas others may be more related to affective trust. For example, to ensure that decisions are fair and transparent, supervisors should insure that people know how and why personnel rules are applied and that the rules are applied equally. This frees

subordinates from wasting time developing hidden agendas or trying to decode others'. Training programs targeting such supervisory behavior may be useful in garnering benefits associated with employee trust in supervisors.

Training programs for enhancing relational skills may be particularly useful, given that affective trust in one's supervisor was associated with positive subordinate behaviors such as communication and ICB. Relational competencies, such as expressing care and showing empathy, resemble some of the skills in emotional intelligence. It is not surprising that empathic behaviors, such as paying attention, listening well, and showing sensitivity, have been found to be of roughly equal importance in leadership effectiveness in small group settings (Kellett, Humphrey, & Sleeth, 2002). Therefore, organizations should be aware of the bottom line effects of supervisory trustworthiness. With this in mind, organizations should recruit and select individuals for supervisory positions who possess interpersonal skills that can facilitate relationship development with others. Also, organizations should provide training opportunities for the current supervisors to enhance relational competencies needed for affective trusting relationships with subordinates. In short, a social capital view of human resource management should be endorsed that permits organizations to make investments not only in individual supervisors but in their interpersonal relationship formation (Leana & Van Buren, 1999).

In contrast to the role of trust in management and trust in the supervisor, the role of coworker trust was not as prominent as expected in this study. Nevertheless, trusting relationships among coworkers were important in connection with job satisfaction. Besides increased job satisfaction, evidence can be found in the literature showing that coworker trust is negatively related to turnover intentions (Ferres, Connell, & Travaglione, 2004). Hence, there may be opportunities for organizations to improve attachment-related outcomes by engendering

trust among peers. For example, assigning buddies to new employees during orientation provides an opportunity to create a rapport between them. Additionally, conventional training programs as well as informal social gatherings provide opportunities to mix together employees who do not normally interact with one another (M. L. Lengnick-Hall & C. A. Lengnick-Hall, 2003).

Lastly, given that resources are finite, the results of the current study may be used to inform decision makers in setting priorities for applying limited resources. In this study, trust in different referents showed some different relationships with work related outcomes, thereby providing guidance on what targets organizations might focus resources on trust-building. For example, if an organization is keen to encourage more cooperation and collaboration among employees, then it might emphasize efforts in cultivating employees' trust in supervisors. If an organization sees the need to boost morale among employees so that they could have more loyalty to the organization overall, then it might focus efforts on establishing employees' affective trust in management. Certainly, more research is needed to advance knowledge concerning conditions under which each combination of foci and bases of employee trust produces desired effects.

### **Future Research**

The current study sought to examine the consequences of trust using a multi-foci, multi-bases perspective of trust. Future research should extend this line of inquiry by examining other work related outcomes such as turnover intentions, withdrawal behavior, unit level performance, and innovation. In addition to validating convergent validity, future research should also strive to establish discriminant validity of trust within a nomological network of related organizational constructs. For instance, the literature on trust in leadership suggests that the distinctions



between trust and transformational leadership, satisfaction with leader, and leader-member exchange (LMX) deserve attention in future research (Dirks & Ferrin, 2002).

Future research should also concentrate on the antecedents of the various combinations of trust within the multi-foci, multi-bases perspective. For instance, in chapter two of this dissertation, I described some possible antecedents to different combinations of trust foci and bases. Empirical questions remain unresolved, however, as to which of these antecedents could give rise to a particular combination of trust bases and foci, and as to under what circumstances in which this would occur. For example, Leventhal's (1980) six rules of procedural justice seems to provide a rationale for the influence of procedural justice on cognitive trust, whereas Lind and Tyler's (1988) group-value model may provide the grounds for interactional justice's influence on affective trust. Therefore, studies exploring the dynamics of such variables within a nomological network may prove to be fruitful in moving the trust literature forward.

Additional work should also explore the relationship of trust's different bases over time. A distinction between trust's two bases was reported in the current study. The interplay of these two bases in an evolving work relationship would be an interesting avenue for future research. As noted previously, it has been argued that a trust relationship at early stages may be more cognition based, whereas at latter stages it may become more affect based. Young and Daniel's (2003) study revealed that at early stages of relationship building, trust tended to be more cognitively determined by levels of competence and the goal congruence, whereas in later stages it depends more on personal feelings. Thus, it is possible that the dominance of the trust bases may shift in stages of relationship development. Questions such as how trust develops with the passage of time and how it evolves from a cognition base to an affect one have not been tested yet. Therefore, research endeavor made in this direction would prove to be fruitful.

A specific area that merits future research attention relates to coworker trust. In the preceding section, I offered possible reasons (i.e., impression management and self-serving motives) for the results showing that helping behavior directed at coworkers was connected more with trust in one's supervisor than with trust in coworkers. Another possible reason for the weak effects of trust in coworkers on helping behavior may reside in the level of analysis. In this study, coworker trust was operationalized as an individual level variable. Trust as a group level variable can be found in a handful of studies that concentrated on the relationships among intragroup conflict, intragroup trust, and group performance (Jehn & Mannix, 2001; Peterson & Behfar, 2003). In these studies all the variables were aggregated to the group level. It may be that coworker helping behavior is actually affected by the context of group peer trust. More attention is warranted, therefore, for the potential influences of group peer trust on individuals' helping behavior.

Another area for more future research relates to communication, especially upward and lateral. Some researchers have called for more content-oriented analysis on communication, which might uncover substantive relationships that otherwise might be neglected. For instance, relational communication characterized by support, empathy, and recognition can result in greater trust in supervisor-subordinate relationships (Willemyns, Gallois, & Callan, 2003). Additionally, non-work-related communication is also found to be beneficial in group member as well as supervisor-subordinate relationships. For example, spontaneous communication such as jokes and personal anecdotes are efficacious in dispelling frustration and tension and simultaneously engendering more excitement (Maruping & Agarwal, 2003). Such positive, personal interactions support affect-based trusting relationships among group members. It is

clear then that future research needs to tap into the content of communication in more detail when examining its relations with workplace trust.

Lastly, this study of trust was conducted in organizations where employees interact on a daily basis. There has been an increasing need to understand situations where such contacts are not possible, as in virtual organizations. Building trust has been identified as a unique challenge for virtual organizations (Handy, 1995; Kirkman, Rosen, Gibson, Tesluk, & McPherson, 2002). Traditional methods of trust-building like social interaction and face-to-face meetings can not be relied upon in virtual organizations. Rather, speed and responsiveness become more important in building trust where interpersonal communication relies on the electronic media (Kirkman et al., 2002). As the concrete means through which interpersonal trust develops in traditional organizations differ from those in virtual organizations, one of the areas for future research would be to assess the applicability of a multi-foci and multi-base perspective of trust in virtual settings.

### **Limitations**

As with most research, this dissertation study is not without limitations. First, the instrument measuring openness to organizational change was adapted from the literature for the purpose of this study, but reverse-scoring and ordering (i.e., a positively-worded item was followed by a negatively-worded item, then by a positively-worded item, and by a negatively-worded item) may have resulted in low scale reliability. Most of the relations that this construct had with others were not significant. Thus, an openness to organizational change instrument with better psychometric properties needs to be developed in future studies.

Second, in this study, supervisors rated task performance, helping behavior, and communication of their subordinates. Significant correlations among these construct ratings raise

a concern for halo effects. If one aspect of a subordinate's job behavior is viewed favorably by a supervisor, other aspects of his/her job behavior may receive favorable evaluations from the supervisor as well. Also, it may well be that helping behavior may be used as a tactic to maintain a positive image in the eyes of the supervisor. In the present study, supervisory ratings of task performance might be inflated by the manifestation of one's helping behavior, or vice versa. By the same token, one's proactive communication might also influence supervisory ratings of task performance. Obtaining criterion ratings from multiple sources (e.g., one's coworkers) may help minimize this potential possibility in future research.

Finally, there are caveats associated with the study design. One caveat regarding the findings of the current study relates to causality. In other words, the cross-sectional design utilized by this study cannot resolve causal relations among study constructs. Any inferences made about causality thus should be treated with caution. Therefore, future research should pursue longitudinal designs or laboratory experiments to counter this threat. Another caveat concerns generalizability of the study results. The study was conducted in a hospital environment. It is possible that some characteristics associated with the healthcare industry might make certain elements of trust more salient than others. Thus, future duplications in other industries would help corroborate the findings.

### **Conclusion**

Theoretical developments with regard to the differentiated bases and foci of employee trust have outpaced empirical research. The current study thus was deemed timely and important. Several potential contributions have been made to the literature. To be able to more completely understand the consequences of trust within organizational settings, I took a more systematic approach to employee trust. Multiple bases and foci were conceptualized and explicitly

recognized in examining the effects of trust in organizations. To support this goal, an instrument was developed so that trust's multiple bases and foci could be simultaneously measured in an organizational setting. By doing this, the current study was able to illustrate that six combinations of employee trust across foci and bases were theoretically and empirically distinguishable, and that the role of trust in an organizational setting is indeed important. As a result, the findings may allow researchers to reconcile some mixed conclusions drawn from the existing literature. Moreover, the results illustrated that some combinations of foci and bases of employee trust may be of greater influence than others depending on the outcome of interest. This may provide guidance for management to better leverage the effects of trust within the constraints of organizational resources. Overall, this study adds more understanding to the role that trust plays in organizations. Foci and bases of workplace trust appear to matter. It is hoped that the current study will serve as an impetus for more research that further examines the foci and bases of workplace trust.

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## **APPENDIX A PILOT SURVEY**

### **COVER LETTER**

Dear Pilot Survey Participants,

As a doctoral student in the College of Business Administration at Louisiana State University, I am currently working on my dissertation pertaining to employees' trust in work organizations. The purpose of this pilot study is to evaluate the clarity of the instruments that are designed to assess trust. For the survey to advance existing knowledge of trust in the workplace, it is important that you provide honest and candid responses.

Please complete the items in the order presented and answer each question as best as you can. The enclosed survey should take only about 20-25 minutes to complete. Your responses to this questionnaire will be held in the strictest confidence. All data collected from this questionnaire will only be accessed by the researcher.

Your time and cooperation are greatly appreciated. If you have any concerns or questions, please feel free to contact me at 578-9067 or via e-mail at [jyang4@lsu.edu](mailto:jyang4@lsu.edu).

Sincerely,

Jane Yang  
Ph.D. Candidate

Think about an organization that you are, or have been, working with. The following statements relate to your attitudes and feelings in that organization. You may believe that you do not have enough information to answer a question. In such cases, you should answer the question as best you can. There are no right or wrong answers. Please read each statement carefully, though some of them appear similar, and indicate the degree of your *agreement* or *disagreement* by circling a number from 1 to 5.

*Below are statements regarding your attitudes and feelings about the top management in the organization. Top management may generally refer to a group of people whose actions have a significant impact on employees. If the organization that you are thinking of does not have such an identifiable set of people, please frame top management as the organization as a whole. To what extent do you agree with the following:*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) I can depend on top management to meet its responsibilities.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
2) I can rely on top management to do what is best at work.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
3) Top managers follow through with commitments they make.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
4) Given top management's track record, I see no reason to doubt its competence.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
5) I can rely on top management to show good judgment when making work-related decisions.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
6) I feel comfortable with top management's decisions because it has always acted in a fair manner.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
7) I feel completely secure with top management because of its predictability and consistency.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
8) I'm confident in top management because it approaches work with professionalism and dedication.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5
9) I feel confident that top management will always care about my well-being.	1- - - - -	2- - - - -	3- - - - -	4- - - - -	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10) I have faith in top management because it would make personal sacrifices for me if I were in need.	1	2	3	4	5
11) Top management can influence me because of my emotional attachment to them.	1	2	3	4	5
12) If I shared my problems with top managers, I know they would respond caringly and constructively.	1	2	3	4	5
13) Top management wouldn't take advantage of me, given our special relationship.	1	2	3	4	5
14) Our sharing relationship lets me talk freely to top management about work difficulties.	1	2	3	4	5
15) I have a special relationship with top management. We can freely share our feelings and hopes.	1	2	3	4	5
16) I would have to say that top management and I have made considerable emotional investments in our relationship.	1	2	3	4	5

*Below are statements regarding your attitudes and feelings about your immediate supervisor. To what extent do you agree with the following:*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) I can depend on my supervisor to meet his/her responsibilities.	1	2	3	4	5
2) I can rely on my supervisor to do what is best at work.	1	2	3	4	5
3) My supervisor follows through with commitments (s)he makes.	1	2	3	4	5
4) Given my supervisor's track record, I see no reason to doubt his/her competence.	1	2	3	4	5
5) I can rely on my supervisor to show good judgment when making work-related decisions.	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6) I feel comfortable with my supervisor's decisions because (s)he has always acted in a fair manner.	1	2	3	4	5
7) I feel completely secure with my supervisor because of his/her predictability and consistency.	1	2	3	4	5
8) I'm confident in my supervisor because (s)he approaches work with professionalism and dedication.	1	2	3	4	5
9) I feel confident that my supervisor will always care about my well-being.	1	2	3	4	5
10) I have faith in my supervisor because (s)he would make personal sacrifices for me if I were in need.	1	2	3	4	5
11) My supervisor can influence me because of my emotional attachment to him/her.	1	2	3	4	5
12) If I shared my problems with my supervisor, I know (s)he would respond caringly and constructively.	1	2	3	4	5
13) My supervisor wouldn't take advantage of me, given our special relationship.	1	2	3	4	5
14) Our sharing relationship lets me talk freely with my supervisor about work difficulties.	1	2	3	4	5
15) I have a special relationship with my supervisor. We can freely share our feelings and hopes.	1	2	3	4	5
16) I would have to say that my supervisor and I have made considerable emotional investments in our relationship.	1	2	3	4	5

*Below are statements regarding your attitudes and feelings about your coworkers who report to the same supervisor. To what extent do you agree with the following:*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) I can depend on my coworkers to meet their responsibilities.	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2) I can rely on my coworkers to do what is best at work.	1	2	3	4	5
3) My coworkers follow through with commitments they make.	1	2	3	4	5
4) Given my coworkers' track records, I see no reason to doubt their competence.	1	2	3	4	5
5) I can rely on my coworkers to show good judgment when making work-related decisions.	1	2	3	4	5
6) I feel comfortable with my coworkers' decisions because they have always acted in a fair manner.	1	2	3	4	5
7) I feel completely secure with my coworkers because of their predictability and consistency.	1	2	3	4	5
8) I'm confident in my coworkers because they approach work with professionalism and dedication.	1	2	3	4	5
9) I feel confident that my coworkers will always care about my well-being.	1	2	3	4	5
10) I have faith in my coworkers because they would make personal sacrifices for me if I were in need.	1	2	3	4	5
11) My coworkers can influence me because of my emotional attachment to them.	1	2	3	4	5
12) If I shared my problems with my coworkers, I know they would respond caringly and constructively.	1	2	3	4	5
13) My coworkers wouldn't take advantage of me, given our special relationship.	1	2	3	4	5
14) Our sharing relationship lets me talk freely with my coworkers about work difficulties.	1	2	3	4	5
15) I have special relationships with my coworkers. We can freely share our feelings and hopes.	1	2	3	4	5
16) I would have to say that my coworkers and I have made considerable emotional investments in our relationships.	1	2	3	4	5

**APPENDIX B**  
**COVER LETTERS USED IN THE MAJOR SURVEY**

Date: August 27, 2004  
From: LeVern S. Meades, Administrator  
Re: LSU survey project

The medical center is cooperating with researchers at Louisiana State University in a research project focusing on relationships at work. By completing the enclosed survey, you will assist both them and us in learning about factors that can make work relationships more effective.

The survey contains a series of questions dealing with attitudes, perceptions, and opinions concerning your job and the people with whom you work. For survey purposes, it is important that you provide responses to all questions even though some of them may seem similar. Please answer each question as best as you can. You may believe that you do not have enough information to answer a question. In such cases, you should answer the question as best as you can based on the information you have. Choose the response that comes closest to your feelings or opinions. The enclosed survey should only take about 15 minutes to complete.

Please note that you are asked to write down the last five digits of your social security number on the questionnaire. This is for research purposes only and will be used for matching employees and supervisors. Information from the survey will be summarized in regard to the medical center as a whole. **Your responses are strictly confidential.** No one from the medical center will have access to your individual responses, nor will the summarized results allow the identification of any individual.

Included with the survey is a business reply return envelope. After completing the survey, please check to be sure you have responded to all items, place it in the return envelope and seal it. You may drop it in the collection box located in the switchboard area at the Inpatient or Outpatient Campus, or return it via U.S. mail **within the next 1 to 3 days.**

Participating in this project is voluntary. I believe the information gained will be very helpful and would greatly appreciate your participation. Thank you in advance for taking the time to complete this survey and helping with this important project!

If you have any questions about this survey, please contact:

Kevin Mossholder  
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Hammond, Louisiana 70402



Date: August 27, 2004  
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The medical center is cooperating with researchers at Louisiana State University in a research project focusing on relationships at work. By completing the enclosed survey, you will assist both them and us in learning about factors that can make work relationships more effective.

The survey contains a series of questions dealing with attitudes, perceptions, and opinions concerning your job and the people with whom you work. For survey purposes, it is important that you provide responses to all questions even though some of them may seem similar. Please answer each question as best as you can. You may believe that you do not have enough information to answer a question. In such cases, you should answer the question as best as you can based on the information you have. Choose the response that comes closest to your feelings or opinions. The enclosed survey should only take about 15 minutes to complete.

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Included with the survey is a business reply return envelope. After completing the survey, please check to be sure you have responded to all items, place it in the return envelope and seal it. You may drop it in the collection box located in the switchboard area at the Inpatient or Outpatient Campus, or return it via U.S. mail **within the next 1 to 3 days.**

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## **APPENDIX C MEASURES**

### **Cognitive Trust in Management**

1. I can depend on management to meet its responsibilities.
2. I can rely on management to do what is best at work.
3. Management follows through with commitments it makes.
4. Given management's track record, I see no reason to doubt its competence.
5. I could be able to feel safe about management because of its consistency.
6. I'm confident in management because it approaches work with professionalism.

### **Affective Trust in Management**

1. I'm confident that management will always care about my personal needs at work.
2. I have faith in management because I feel it would make sacrifices for me if I were in need.
3. If I shared my problems with management, I know they would respond with care.
4. I'm confident that I could share my work difficulties with management.
5. I'm sure I could openly communicate my feelings to management.
6. Because of their sincerity, I feel at ease with top managers.

### **Cognitive Trust in Supervisor**

1. I can depend on my supervisor to meet his/her responsibilities.
2. I can rely on my supervisor to do what is best at work.
3. My supervisor follows through with commitments he/she makes.
4. Given my supervisor's track record, I see no reason to doubt his/her competence.
5. I could be able to feel safe about my supervisor because of his/her consistency.
6. I'm confident in my supervisor because (s)he approaches work with professionalism.

### **Affective Trust in Supervisor**

1. I'm confident that my supervisor will always care about my personal needs at work.
2. I have faith in my supervisor because I feel (s)he would make sacrifices for me if I were in need.
3. If I shared my problems with my supervisor, I know (s)he would respond with care.
4. I'm confident that I could share my work difficulties with my supervisor.
5. I'm sure I could openly communicate my feelings to my supervisor.
6. Because of his/her sincerity, I feel at ease with my supervisor.

### **Cognitive Trust in Coworkers**

1. I can depend on my coworkers to meet their responsibilities.
2. I can rely on my coworkers to do what is best at work.
3. Given my coworkers' track records, I see no reason to doubt their competence.
4. My coworkers follow through with commitments they make.
5. I could be able feel safe about my coworkers because of their consistency.
6. I'm confident in my coworkers because they approach work with professionalism.

**Affective Trust in Coworkers**

1. I'm confident that my coworkers will always care about my personal needs at work.
2. I have faith in my coworkers because I feel they would make sacrifices for me if I were in need.
3. If I shared my problems with my coworkers, I know they would respond with care.
4. I'm confident that I could share my work difficulties with my coworkers.
5. I'm sure I could openly communicate my feelings to my coworkers.
6. Because of their sincerity, I feel at ease with my coworkers.

**Affective Organizational Commitment (Meyer & Allen, 1984)**

1. I would be very happy to spend the rest of my career with this organization.
2. I enjoy discussing my organization with people outside of it.
3. I really feel as if this organization's problems are my own.
4. This organization has a great deal of personal meaning for me.
5. I feel a strong sense of belonging to my organization.

**Continuance Organizational Commitment (Meyer & Allen, 1984)**

1. I would rather not to leave this organization because there are few employment alternatives available.
2. Right now, staying with my organization is a matter of necessity as much as desire.
3. I feel that I have too few options to consider leaving this organization.
4. Leaving would require personal sacrifice as another organization may not match the overall benefits I have here.
5. It would be too costly for me to leave my organization in the near future.

**Task Conflict with Supervisor (Pearson et al., 2002; Xin et al., 2003)**

1. How often do you disagree with your supervisor about how your work should be done?
2. To what extent do you have different opinions than your supervisor regarding your work tasks?
3. How frequently do you have different ideas than your supervisor when working on projects?
4. How often do you disagree with your supervisor about procedures that should be used to do your work?

**Relationship Conflict with Supervisor (Pearson et al., 2002; Xin et al., 2003)**

1. How often is there bickering between you and your supervisor?
2. How often do you get angry with your supervisor at work?
3. How much tension is there between you and your supervisor?
4. How much personal friction is present between you and your supervisor?

**Task-focused OCBI (Settoon & Mossholder, 2002)**

1. Takes on extra responsibilities in order to help coworkers when things get demanding at work.
2. Helps coworkers with difficult assignments, even when assistance is not directly requested.
3. Assists coworkers with heavy work loads even though it is not part of job.
4. Helps coworkers who are running behind in their work activities.
5. Helps coworkers with work when they have been absent.

**Person-focused OCBI (*Settoon & Mossholder, 2002*)**

1. Listens to coworkers when they have to get something off their chest.
2. Takes time to listen to coworkers' problems and worries.
3. Takes a personal interest in coworkers.
4. Shows concern and courtesy toward coworkers, even under the most trying business situations.
5. Makes an extra effort to understand the problems faced by coworkers.

**Overall Job Satisfaction (*Hackman & Oldham, 1975*)**

1. All things considered, I am satisfied with my job.
2. I like my job.
3. I am generally satisfied with the work I do in this job.

**Openness to Organizational Change (*Miller et al., 1994*)**

1. I would consider myself to be "open" to changes at the medical center.
2. I would be resistant to changes at the medical center. (R)
3. I would look forward to changes in my work roles brought about by the implementation of the changes at the medical center.
4. I am quite reluctant to consider changing the way I now do my work. (R)

**Task Performance (*Williams & Anderson, 1991*)**

1. Performs his/her job well.
2. Adequately completes assigned duties.
3. Fulfills responsibilities specified in job description.
4. Performs tasks that are expected of him/her.
5. Meets formal performance requirements of the job.

**Supervisor-rated Upward Organizational Communication (*developed for this study*)**

1. This employee frequently initiates communication with me.
2. This employee exchanges job relevant information with me.
3. This employee minimizes the information given to me. (R)
4. This employee deliberately withholds some information when communicating with me. (R)

**Supervisor-rated Lateral Organizational Communication (*developed for this study*)**

1. This coworker frequently initiates communication with me.
2. This coworker exchanges job relevant information with me.
3. This coworker minimizes the information given to me. (R)
4. This coworker deliberately withholds some information when communicating with me. (R)

**Job Interdependence (*Pearce & Gregersen, 1991*)**

1. I work closely with others in doing my work.
2. I must coordinate my efforts with others to get my job done.
3. My own performance is dependent on receiving accurate information from others.
4. The way I perform my jobs has a significant impact on others.
5. My work requires me to consult with others fairly frequently.

**Creative Self-efficacy (*Tierney & Farmer, 2002*)**

1. I feel that I am good at generating novel ideas.
2. I have confidence in my ability to solve problems creatively.
3. I have a knack for further developing the ideas of others.

## VITA

Jixia Yang received her Bachelor of Arts degree in information management and her Bachelor of Arts degree in international economics and trade from Nanjing University, People's Republic of China. She has co-authored a paper that has appeared in the *Journal of Organizational Behavior*. Also, she has presented papers at the annual meetings of the Academy of Management, Southern Management Association, Society of Industrial and Organizational Psychology, and International Society of Franchising. Her research interests include groups and multilevel issues, emotions at the workplace, and interpersonal influences in organizations. The degree of Doctor of Philosophy will be conferred on Jixia Yang at the May 2005 Commencement.